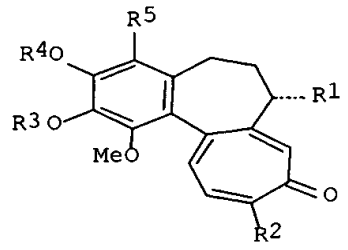
L10 ANSWER 1 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 2002:964321 CAPLUS
DN 138:39443
TI Preparation of colchicine derivatives as anticancer agents and immunosuppresssants
IN Kim, Wan Joo; Kim, Kyoung Soo; Kim, Myung Hwa; Park, Jong Yek; Jang, Jung Min; Choi, Jae Won; Kim, Dong Hoo
PA Chemtech Research Incorporation, S. Korea; Korea Tobacco & Ginseng Corporation
SO PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002100824	A1	20021219	WO 2002-KR996	20020527

W: AU, BR, CA, CN, HU, IL, IN, JP, KR, MX, PL, RU, TR, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

PRAI KR 2001-29341 A 20010528
OS MARPAT 138:39443
GI



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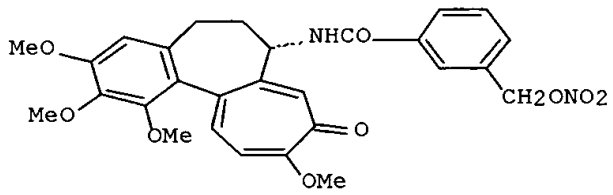


II

AB The title compds. e.g. I (R1 = NHCOMe, NHCOA, O2CA; R2 = MeO, H, MeS, NHCOA, O2CA; R3, R4 = Me, COA; R5 = H, CH2OMe, CH2NHCOMe, CH2NHCOA, CH2O2CA; A = haloalkyl, halomethylphenylalkyl, halomethylbenzoyl, nitrooxyalkyl, nitrooxyalkylphenylalkyl, nitromethylbenzoyl) and their pharmaceutical acceptable salts were prepd. as anticancer, antiproliferous and immunosuppressive agents. Thus, deacetylthiocolchicine was treated with 3-chloromethylbenzoyl chloride to give the corresponding chloromethylbenzamide, which underwent substitution with NaI and the iodomethylbenzamide deriv. was then treated with AgNO3 to give the nitrooxymethyl deriv II. The ED50 of II against human MCF cancer cells was 0.02 nM.

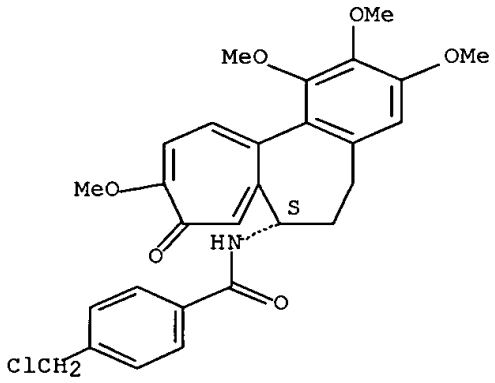
IT **478361-68-1P 478361-69-2P 478361-74-9P 478361-75-0P 478362-10-6P 478362-15-1P 478362-23-1P 478362-25-3P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of colchicine derivs. as anticancer agents and immunosuppresssants)

RN 478361-68-1 CAPLUS

CN Benzamide, 4-(chloromethyl)-N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

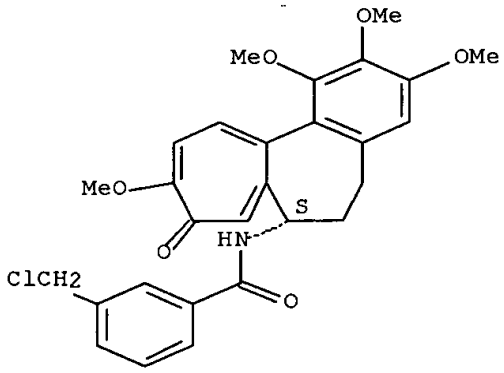
Absolute stereochemistry.



RN 478361-69-2 CAPLUS

CN Benzamide, 3-(chloromethyl)-N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

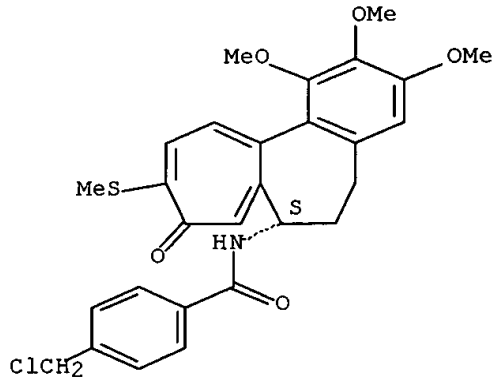
Absolute stereochemistry.



RN 478361-74-9 CAPLUS

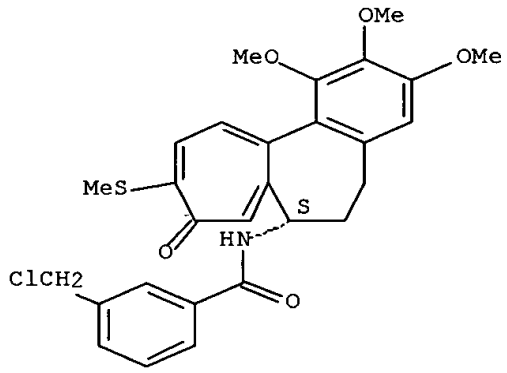
CN Benzamide, 4-(chloromethyl)-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



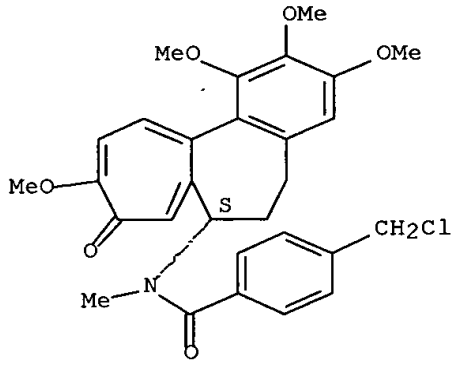
RN 478361-75-0 CAPLUS
CN Benzamide, 3-(chloromethyl)-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



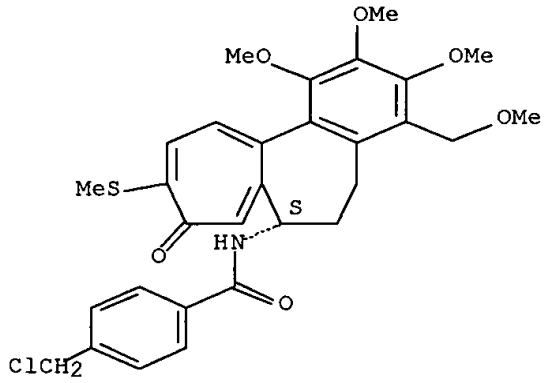
RN 478362-10-6 CAPLUS
CN Benzamide, 4-(chloromethyl)-N-methyl-N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



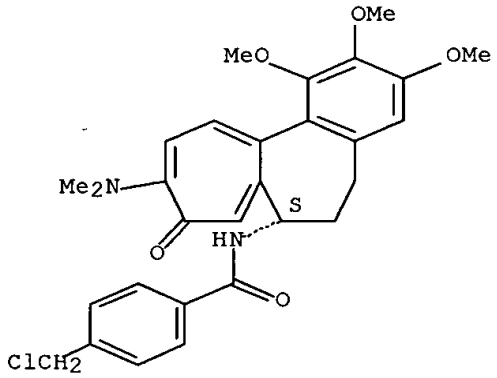
RN 478362-15-1 CAPLUS
CN Benzamide, 4-(chloromethyl)-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-4-(methoxymethyl)-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



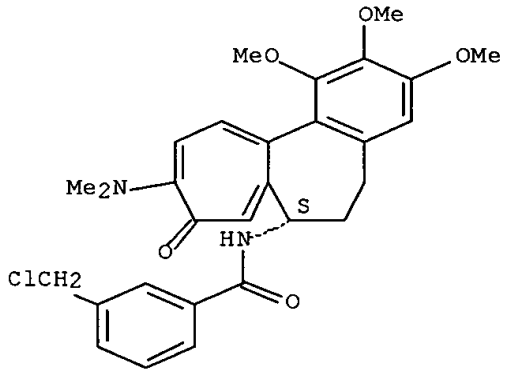
RN 478362-23-1 CAPLUS
CN Benzamide, 4-(chloromethyl)-N-[(7S)-10-(dimethylamino)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 478362-25-3 CAPLUS
CN Benzamide, 3-(chloromethyl)-N-[(7S)-10-(dimethylamino)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

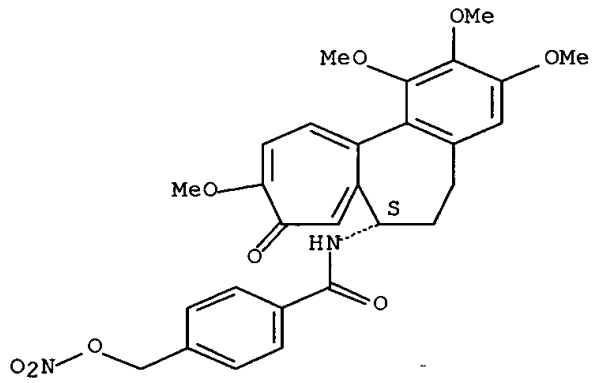
Absolute stereochemistry.



IT **478361-71-6P 478361-72-7P 478361-77-2P**
478361-78-3P 478362-03-7P 478362-04-8P
478362-12-8P 478362-18-4P 478362-24-2P
478362-26-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of colchicine derivs. as anticancer agents and immunosuppresssants)

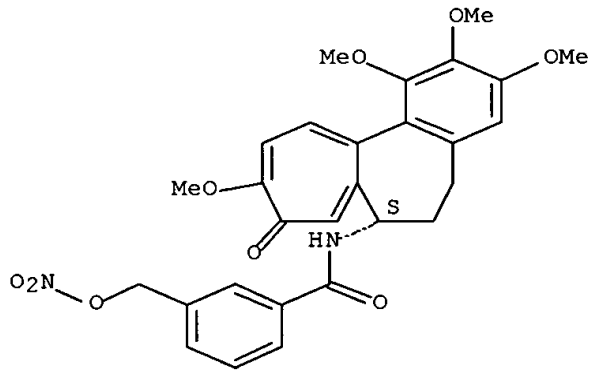
RN 478361-71-6 CAPLUS
CN Benzamide, 4-[(nitrooxy)methyl]-N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



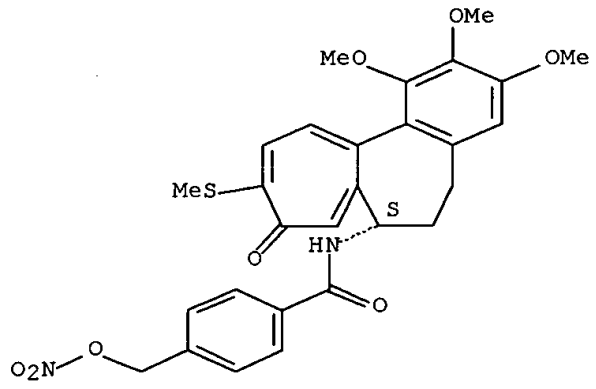
RN 478361-72-7 CAPLUS
CN Benzamide, 3-[(nitrooxy)methyl]-N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



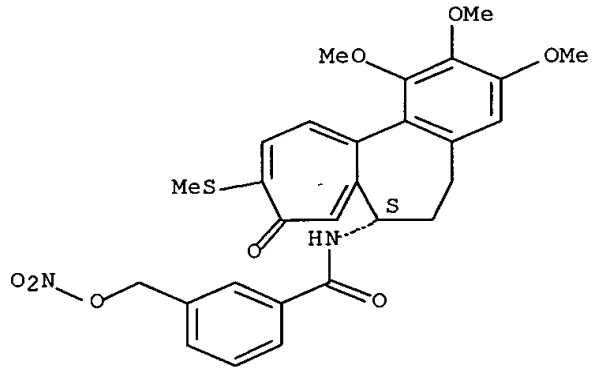
RN 478361-77-2 CAPLUS
CN Benzamide, 4-[(nitrooxy)methyl]-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



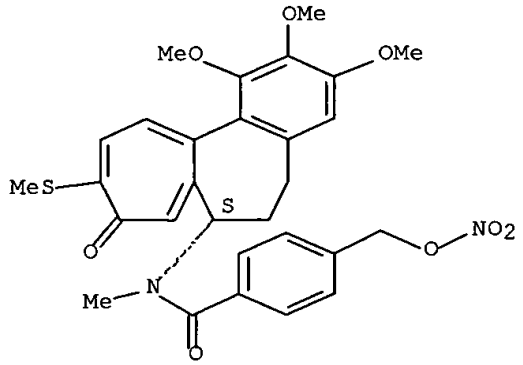
RN 478361-78-3 CAPLUS
CN Benzamide, 3-[(nitrooxy)methyl]-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 478362-03-7 CAPLUS
CN Benzamide, N-methyl-4-[(nitrooxy)methyl]-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

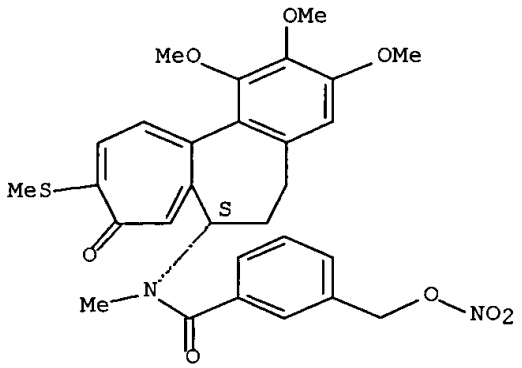
Absolute stereochemistry.



RN 478362-04-8 CAPLUS
CN Benzamide, N-methyl-3-[(nitrooxy)methyl]-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA

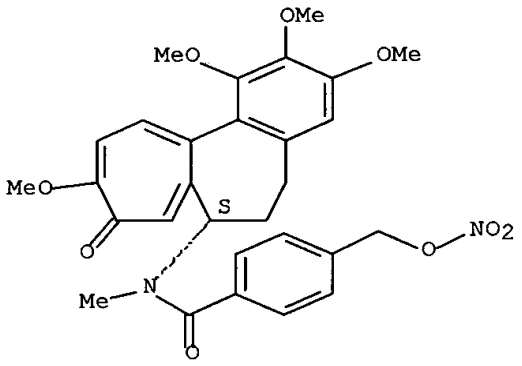
INDEX NAME)

Absolute stereochemistry.



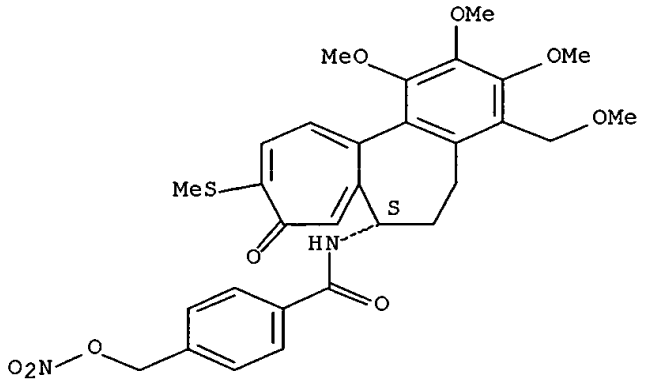
RN 478362-12-8 CAPLUS
CN Benzamide, N-methyl-4-[(nitrooxy)methyl]-N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



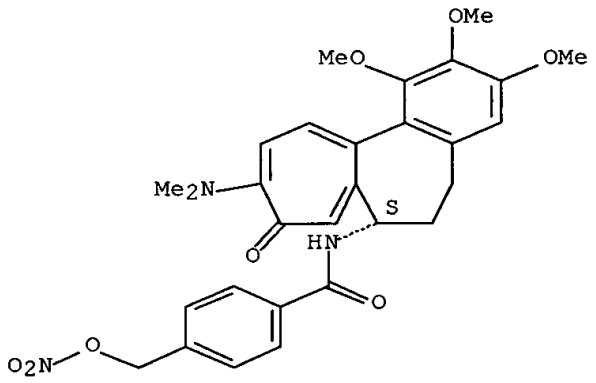
RN 478362-18-4 CAPLUS
CN Benzamide, 4-[(nitrooxy)methyl]-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-4-(methoxymethyl)-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



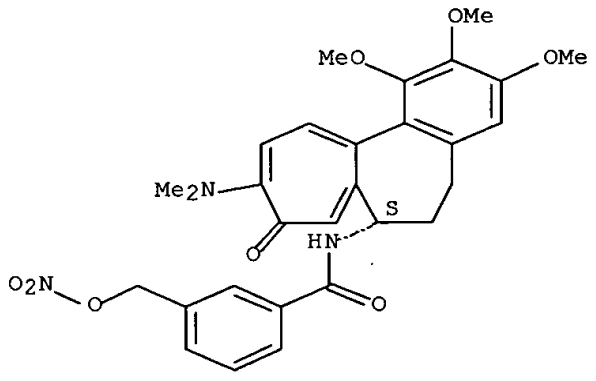
RN 478362-24-2 CAPLUS
CN Benzamide, N-[(7S)-10-(dimethylamino)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-
9-oxobenzo[a]heptalen-7-yl]-4-[(nitrooxy)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 478362-26-4 CAPLUS
CN Benzamide, N-[(7S)-10-(dimethylamino)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-
9-oxobenzo[a]heptalen-7-yl]-3-[(nitrooxy)methyl]- (9CI) (CA INDEX NAME)

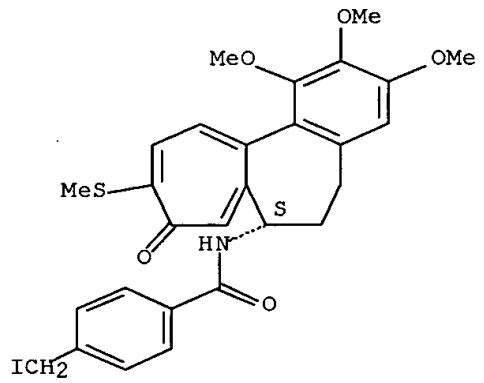
Absolute stereochemistry.



IT **478362-33-3P 478362-35-5P 478362-42-4P**
478362-43-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of colchicine derivs. as anticancer agents and immunosuppresssants)

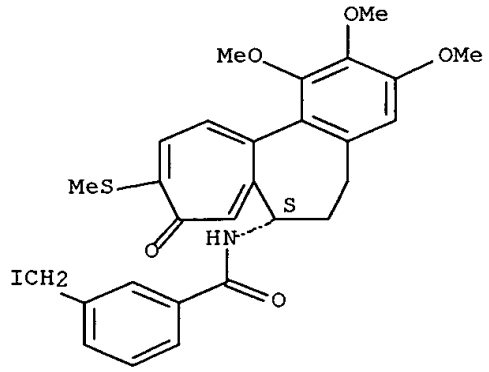
RN 478362-33-3 CAPLUS
CN Benzamide, 4-(iodomethyl)-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



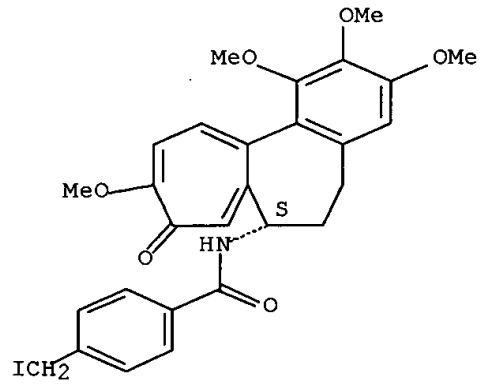
RN 478362-35-5 CAPLUS
CN Benzamide, 3-(iodomethyl)-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



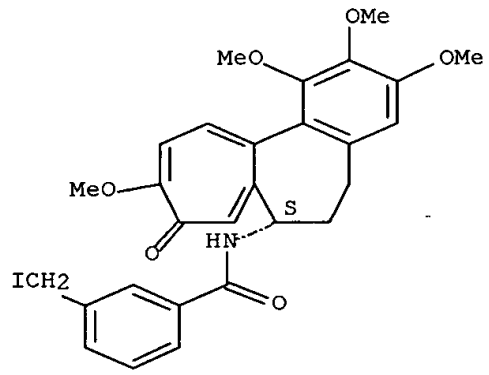
RN 478362-42-4 CAPLUS
CN Benzamide, 4-(iodomethyl)-N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 478362-43-5 CAPLUS
CN Benzamide, 3-(iodomethyl)-N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

Appl's

L10 ANSWER 2 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 2002:637637 CAPLUS
DN 137:185325
TI Preparation of acylated 6,7,8,9-tetrahydro-5H-benzocycloheptenylamines as stimulators of endothelial NO-synthase transcription
IN Strobel, Hartmut; Wohlfart, Paulus
PA Aventis Pharma Deutschland Gmbh, Germany
SO PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002064546	A2	20020822	WO 2002-EP1449	20020212
	WO 2002064546	A3	20021107		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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PRAI	EP 2001-102853	A	20010213		

OS MARPAT 137:185325
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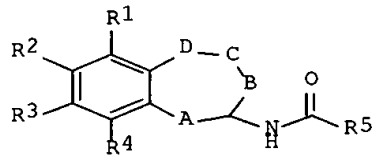

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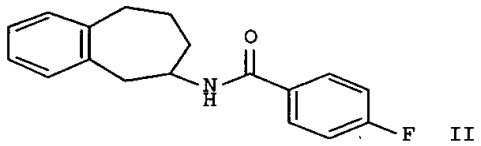


II

AB Title compds. I [wherein R1 and R4 = independently H, (pseudo)halo, CF3, NO2, or (un)substituted alkyl, alkenyl, alkynyl, Ph, heteroaryl, amino, alkoxy, sulfamoyl, etc.; R2 and R3 = independently H, (pseudo)halo, OH, PhO, alkoxy, CF3, CN, NO2, or (un)substituted alkyl, amino, acylamino, etc.; A = CH2, CHOH, or CH(alkyl); B, C, and D = independently CH2 or CH(alkyl); R5 = (un)substituted (hetero)aryl; and stereoisomers, mixts., or pharmaceutically acceptable salts thereof] were prepd. as stimulators of endothelial NO-synthase (eNOS) transcription, which has a vasodilating effect and inhibits the aggregation of platelets, the adhesion of leukocytes to the endothelium, and the proliferation of intimal smooth muscle cells. For example, amidation of 4-fluorobenzoic acid chloride with 6,7,8,9-tetrahydro-5H-benzocyclohepten-6-ylamine in the presence of TEA in dioxane afforded II. The latter activated eNOS transcription in primary human umbilical vein cord endothelial cells (HUVEC) with EC50 of 0.02 .mu.M. I are useful for the treatment of cardiovascular diseases, stable or unstable angina pectoris, coronary heart disease, Prinzmetal angina, acute coronary syndrome, heart failure, myocardial infarction, stroke, thrombosis, peripheral artery occlusive disease, endothelial dysfunction, atherosclerosis, restenosis, endothelial damage after PTCA, hypertension, essential hypertension,

pulmonary hypertension, secondary hypertension, renovascular hypertension, chronic glomerulonephritis, erectile dysfunction, ventricular arrhythmia, diabetes, diabetes complications, nephropathy, retinopathy, angiogenesis, asthma bronchial, chronic renal failure, cirrhosis of the liver, osteoporosis, or restricted memory performance or for a restricted ability to learn, or the lowering of cardiovascular risk of postmenopausal women or after intake of contraceptives (no data).

IT **450366-31-1P**

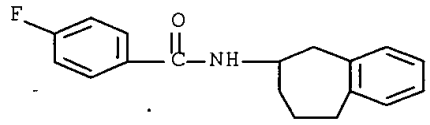
RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(eNOS transcription stimulator; prepn. of acylated tetrahydrobenzocycloheptenylamines as stimulators of endothelial NO-synthase transcription)

RN 450366-31-1 CAPLUS

CN Benzamide, 4-fluoro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-(9CI)

(CA INDEX NAME)



IT **450366-32-2P**, (-)-4-Fluoro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)benzamide **450366-33-3P**, (+)-4-Fluoro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)benzamide **450366-39-9P 450366-41-3P 450366-56-0P 450366-57-1P 450366-59-3P 450366-60-6P 450366-61-7P 450366-62-8P 450366-63-9P 450366-64-0P 450366-65-1P 450366-66-2P 450366-67-3P 450366-68-4P 450366-70-8P 450366-71-9P 450366-72-0P 450366-73-1P 450366-77-5P 450366-78-6P 450366-79-7P 450366-80-0P 450366-81-1P 450366-82-2P 450366-83-3P 450366-84-4P 450366-88-8P 450366-89-9P 450366-90-2P 450366-91-3P 450367-70-1P 450367-71-2P 450367-72-3P 450367-73-4P 450367-83-6P 450367-84-7P 450368-15-7P 450368-16-8P 450368-17-9P 450368-18-0P**

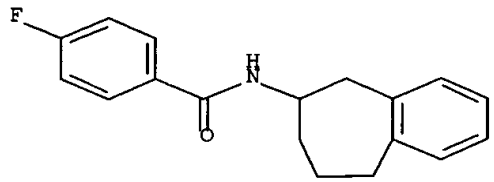
RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(eNOS transcription stimulator; prepn. of acylated tetrahydrobenzocycloheptenylamines as stimulators of endothelial NO-synthase transcription)

RN 450366-32-2 CAPLUS

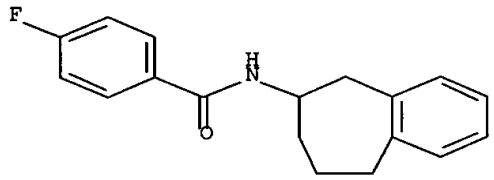
CN Benzamide, 4-fluoro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, (-)-(9CI) (CA INDEX NAME)

Rotation (-).



RN 450366-33-3 CAPLUS
CN Benzamide, 4-fluoro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, (+)-
(9CI) (CA INDEX NAME)

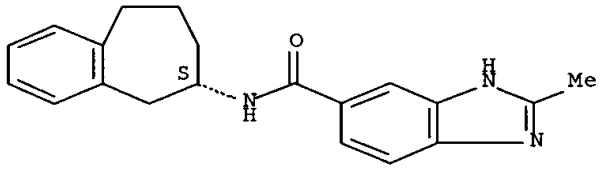
Rotation (+).



RN 450366-39-9 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-methyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

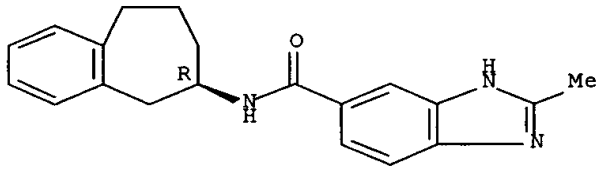
Absolute stereochemistry.

548/309.7
514/387



RN 450366-41-3 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-methyl-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

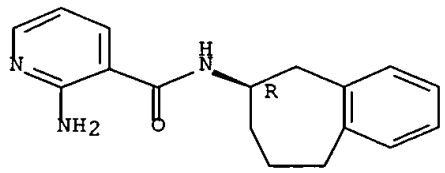
Absolute stereochemistry.



RN 450366-56-0 CAPLUS

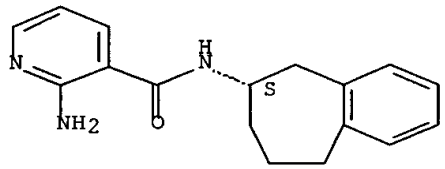
CN 3-Pyridinecarboxamide, 2-amino-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



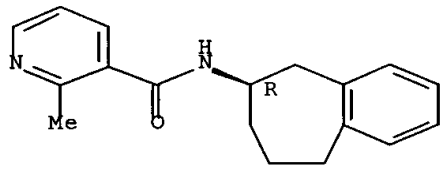
RN 450366-57-1 CAPLUS
CN 3-Pyridinecarboxamide, 2-amino-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



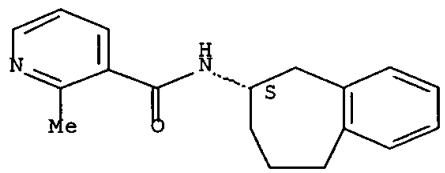
RN 450366-59-3 CAPLUS
CN 3-Pyridinecarboxamide, 2-methyl-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



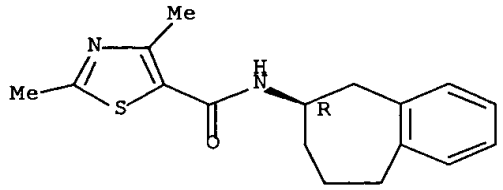
RN 450366-60-6 CAPLUS
CN 3-Pyridinecarboxamide, 2-methyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 450366-61-7 CAPLUS
CN 5-Thiazolecarboxamide, 2,4-dimethyl-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

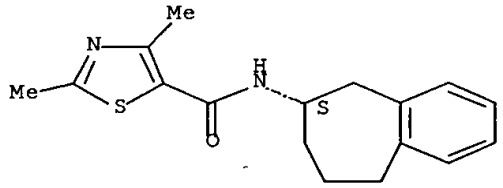
Absolute stereochemistry.



548/200

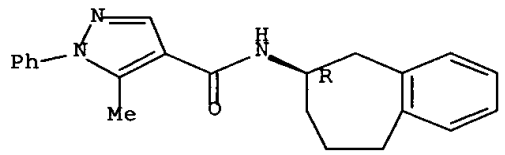
RN 450366-62-8 CAPLUS
CN 5-Thiazolecarboxamide, 2,4-dimethyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 450366-63-9 CAPLUS
CN 1H-Pyrazole-4-carboxamide, 5-methyl-1-phenyl-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



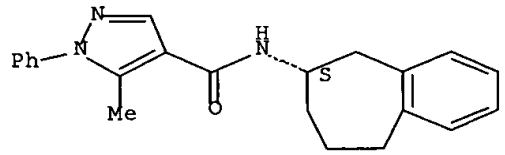
548/374.1

514/365

514/406

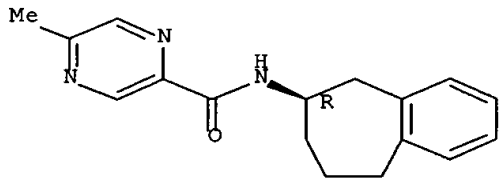
RN 450366-64-0 CAPLUS
CN 1H-Pyrazole-4-carboxamide, 5-methyl-1-phenyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



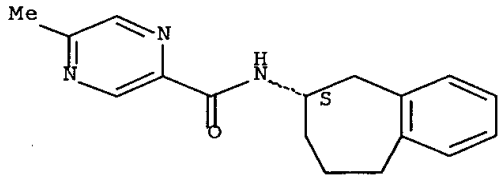
RN 450366-65-1 CAPLUS
CN Pyrazinecarboxamide, 5-methyl-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 450366-66-2 CAPLUS
CN Pyrazinecarboxamide, 5-methyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

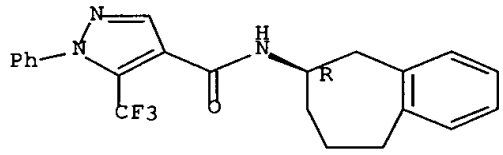
Absolute stereochemistry.



544/406
514/255.06

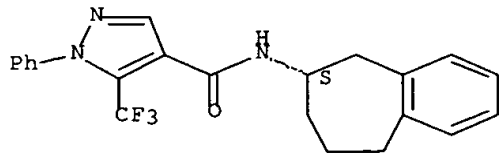
RN 450366-67-3 CAPLUS
CN 1H-Pyrazole-4-carboxamide, 1-phenyl-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



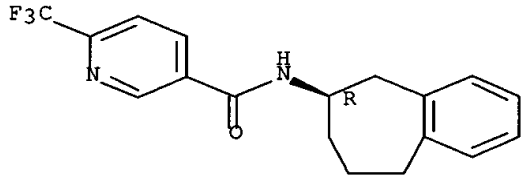
RN 450366-68-4 CAPLUS
CN 1H-Pyrazole-4-carboxamide, 1-phenyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



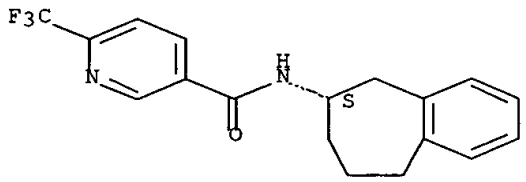
RN 450366-70-8 CAPLUS
CN 3-Pyridinecarboxamide, N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



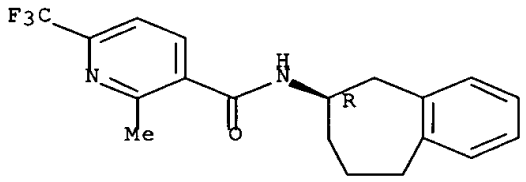
RN 450366-71-9 CAPLUS
CN 3-Pyridinecarboxamide, N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



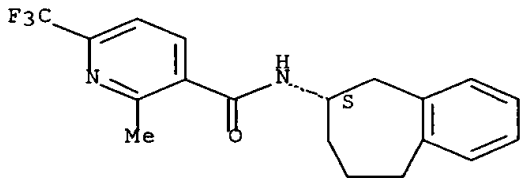
RN 450366-72-0 CAPLUS
CN 3-Pyridinecarboxamide, 2-methyl-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



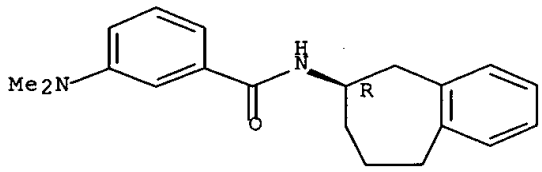
RN 450366-73-1 CAPLUS
CN 3-Pyridinecarboxamide, 2-methyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



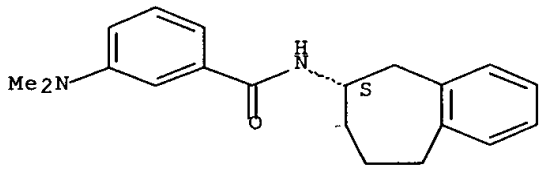
RN 450366-77-5 CAPLUS
CN Benzamide, 3-(dimethylamino)-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



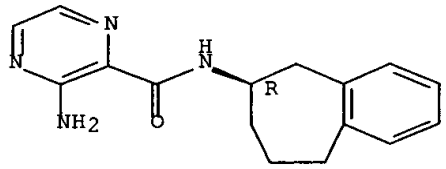
RN 450366-78-6 CAPLUS
CN Benzamide, 3-(dimethylamino)-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



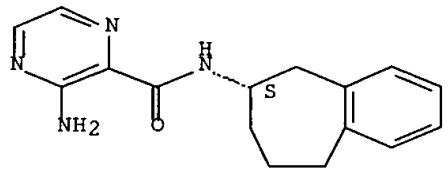
RN 450366-79-7 CAPLUS
CN Pyrazinecarboxamide, 3-amino-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



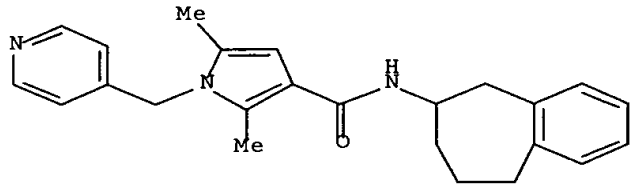
RN 450366-80-0 CAPLUS
CN Pyrazinecarboxamide, 3-amino-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



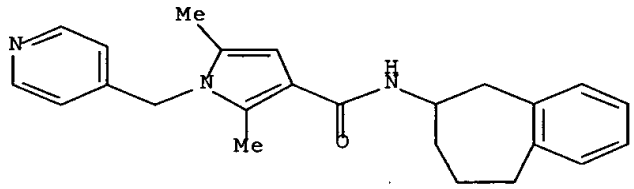
RN 450366-81-1 CAPLUS
CN 1H-Pyrrole-3-carboxamide, 2,5-dimethyl-1-(4-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).



RN 450366-82-2 CAPLUS
CN 1H-Pyrrole-3-carboxamide, 2,5-dimethyl-1-(4-pyridinylmethyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, (-)- (9CI) (CA INDEX NAME)

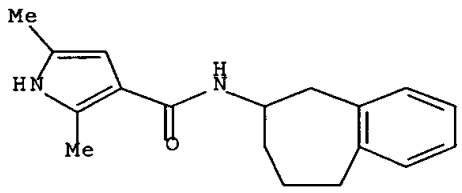
Rotation (-).



RN 450366-83-3 CAPLUS
CN 1H-Pyrrole-3-carboxamide, 2,5-dimethyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, (+)- (9CI) (CA INDEX NAME)

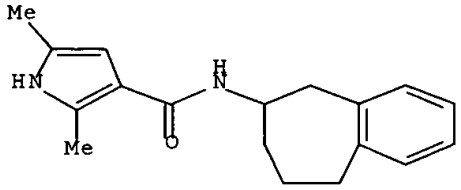
Rotation (+).

548/537



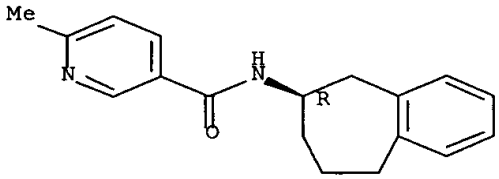
RN 450366-84-4 CAPLUS
CN 1H-Pyrrole-3-carboxamide, 2,5-dimethyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



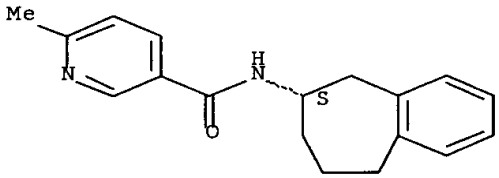
RN 450366-88-8 CAPLUS
CN 3-Pyridinecarboxamide, 6-methyl-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



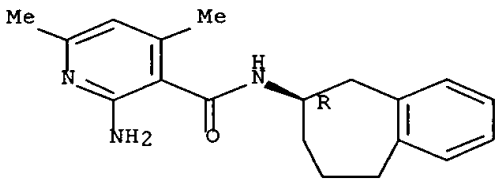
RN 450366-89-9 CAPLUS
CN 3-Pyridinecarboxamide, 6-methyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 450366-90-2 CAPLUS
CN 3-Pyridinecarboxamide, 2-amino-4,6-dimethyl-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

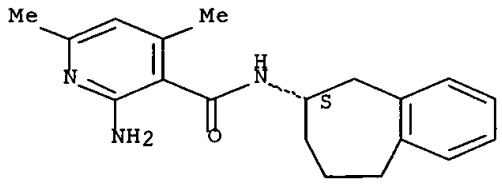
Absolute stereochemistry.



RN 450366-91-3 CAPLUS
CN 3-Pyridinecarboxamide, 2-amino-4,6-dimethyl-N-[(6S)-6,7,8,9-tetrahydro-5H-

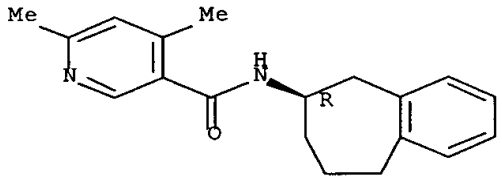
benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



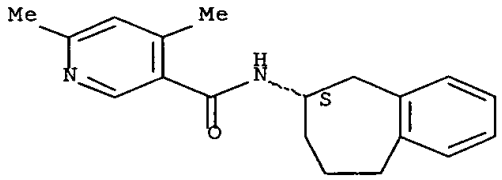
RN 450367-70-1 CAPLUS
CN 3-Pyridinecarboxamide, 4,6-dimethyl-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



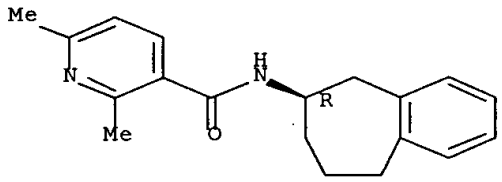
RN 450367-71-2 CAPLUS
CN 3-Pyridinecarboxamide, 4,6-dimethyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 450367-72-3 CAPLUS
CN 3-Pyridinecarboxamide, 2,6-dimethyl-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

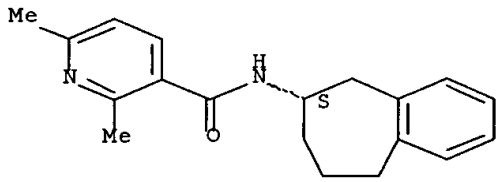
Absolute stereochemistry.



RN 450367-73-4 CAPLUS

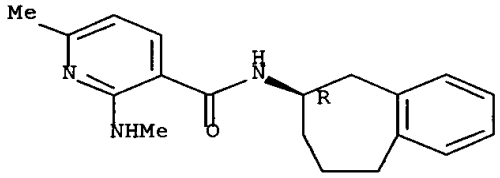
CN 3-Pyridinecarboxamide, 2,6-dimethyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



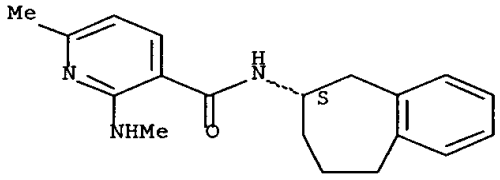
RN 450367-83-6 CAPLUS
CN 3-Pyridinecarboxamide, 6-methyl-2-(methylamino)-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



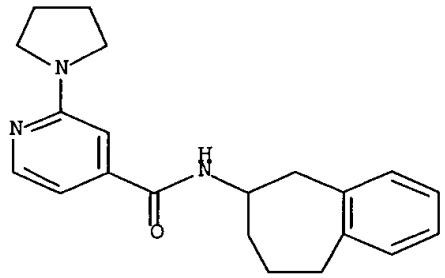
RN 450367-84-7 CAPLUS
CN 3-Pyridinecarboxamide, 6-methyl-2-(methylamino)-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



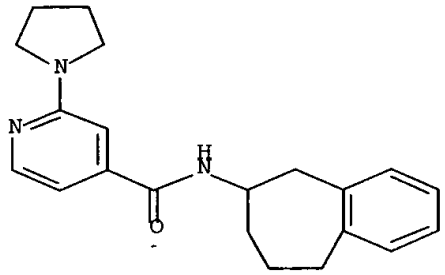
RN 450368-15-7 CAPLUS
CN 4-Pyridinecarboxamide, 2-(1-pyrrolidinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).



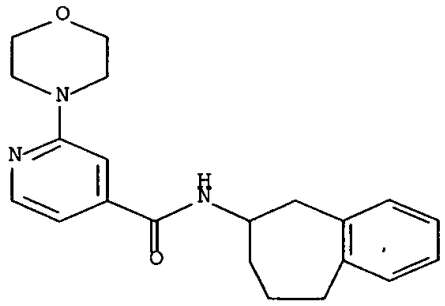
RN 450368-16-8 CAPLUS
CN 4-Pyridinecarboxamide, 2-(1-pyrrolidinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



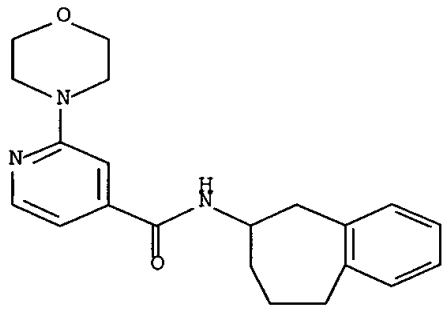
RN 450368-17-9 CAPLUS
CN 4-Pyridinecarboxamide, 2-(4-morpholinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, (-)- (9CI) (CA INDEX NAME)

Rotation (-).



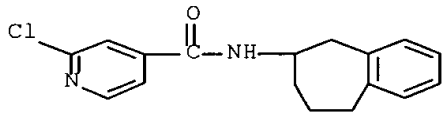
RN 450368-18-0 CAPLUS
CN 4-Pyridinecarboxamide, 2-(4-morpholinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

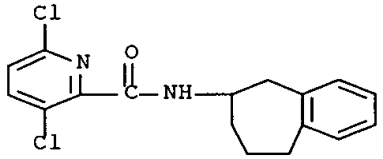


IT **450366-76-4P 450368-04-4P 450368-05-5P**
450368-07-7P 450368-09-9P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(eNOS transcription stimulator; prepn. of acylated tetrahydrobenzocycloheptenylamines as stimulators of endothelial NO-synthase transcription)

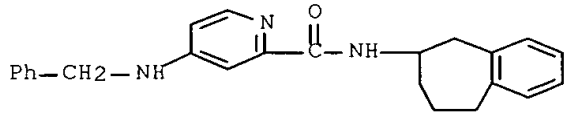
RN 450366-76-4 CAPLUS
CN 4-Pyridinecarboxamide, 2-chloro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



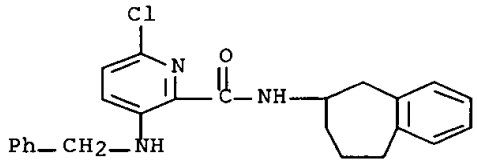
RN 450368-04-4 CAPLUS
CN 2-Pyridinecarboxamide, 3,6-dichloro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



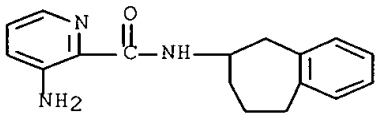
RN 450368-05-5 CAPLUS
CN 2-Pyridinecarboxamide, 4-[(phenylmethyl)amino]-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450368-07-7 CAPLUS
CN 2-Pyridinecarboxamide, 6-chloro-3-[(phenylmethyl)amino]-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450368-09-9 CAPLUS
CN 2-Pyridinecarboxamide, 3-amino-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



IT **450366-34-4P 450366-35-5P 450366-36-6P**
450366-37-7P 450366-38-8P 450366-42-4P
450366-43-5P 450366-44-6P 450366-45-7P
450366-46-8P 450366-47-9P 450366-48-0P
450366-49-1P 450366-50-4P 450366-51-5P
450366-52-6P 450366-53-7P 450366-54-8P
450366-55-9P 450366-58-2P 450366-69-5P
450366-75-3P 450366-85-5P 450366-86-6P
450366-87-7P 450366-92-4P 450366-94-6P
450366-96-8P 450366-98-0P 450366-99-1P
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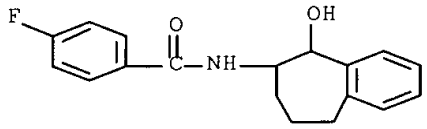
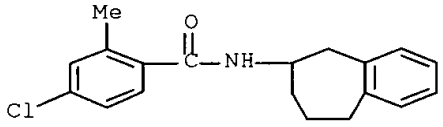
450367-88-1P 450367-89-2P 450367-90-5P
450367-91-6P 450367-92-7P 450367-93-8P
450367-95-0P 450367-96-1P 450367-97-2P

450367-99-4P 450368-01-1P 450368-02-2P
450368-03-3P 450368-08-8P 450368-10-2P
450368-11-3P 450368-12-4P 450368-14-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(eNOS transcription stimulator; prepn. of acylated tetrahydrobenzocycloheptenylamines as stimulators of endothelial NO-synthase transcription)

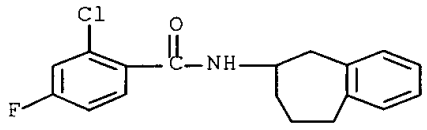
RN 450366-34-4 CAPLUS
CN Benzamide, 4-fluoro-N-(6,7,8,9-tetrahydro-5-hydroxy-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



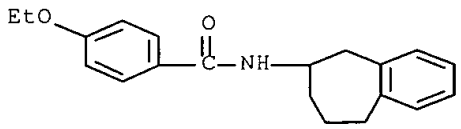
RN 450366-35-5 CAPLUS
CN Benzamide, 4-chloro-2-methyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



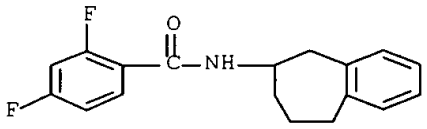
RN 450366-36-6 CAPLUS
CN Benzamide, 2-chloro-4-fluoro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



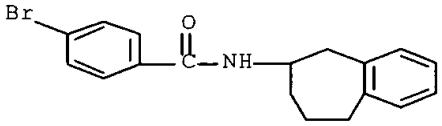
RN 450366-37-7 CAPLUS
CN Benzamide, 4-ethoxy-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI)
(CA INDEX NAME)



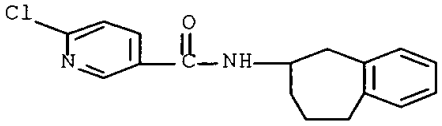
RN 450366-38-8 CAPLUS
CN Benzamide, 2,4-difluoro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-
(9CI) (CA INDEX NAME)



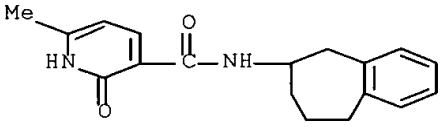
RN 450366-42-4 CAPLUS
CN Benzamide, 4-bromo-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-
(9CI)
(CA INDEX NAME)



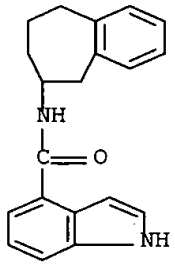
RN 450366-43-5 CAPLUS
CN 3-Pyridinecarboxamide, 6-chloro-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-
6-yl)- (9CI) (CA INDEX NAME)



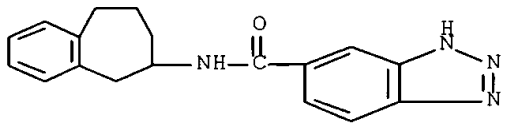
RN 450366-44-6 CAPLUS
CN 3-Pyridinecarboxamide, 1,2-dihydro-6-methyl-2-oxo-N-(6,7,8,9-tetrahydro-
5H-
benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



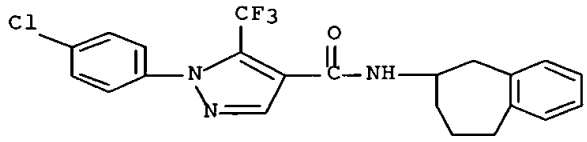
RN 450366-45-7 CAPLUS
CN 1H-Indole-4-carboxamide, N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-
yl)-
(9CI) (CA INDEX NAME)



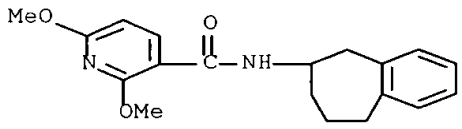
RN 450366-46-8 CAPLUS
CN 1H-Benzotriazole-5-carboxamide, N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-
6-yl)- (9CI) (CA INDEX NAME)



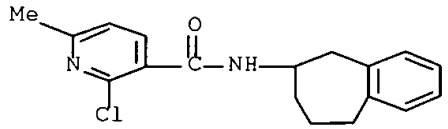
RN 450366-47-9 CAPLUS
CN 1H-Pyrazole-4-carboxamide, 1-(4-chlorophenyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



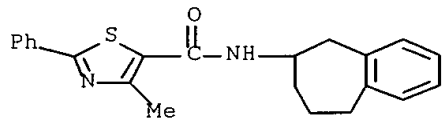
RN 450366-48-0 CAPLUS
CN 3-Pyridinecarboxamide, 2,6-dimethoxy-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



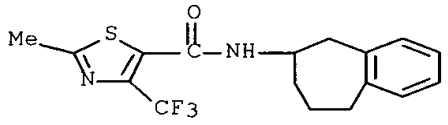
RN 450366-49-1 CAPLUS
CN 3-Pyridinecarboxamide, 2-chloro-6-methyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



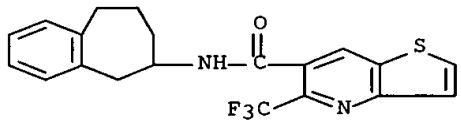
RN 450366-50-4 CAPLUS
CN 5-Thiazolecarboxamide, 4-methyl-2-phenyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



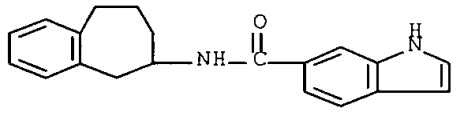
RN 450366-51-5 CAPLUS
CN 5-Thiazolecarboxamide, 2-methyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 450366-52-6 CAPLUS
CN Thieno[3,2-b]pyridine-6-carboxamide, N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

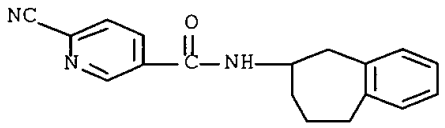


RN 450366-53-7 CAPLUS
CN 1H-Indole-6-carboxamide, N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-
(9CI) (CA INDEX NAME)

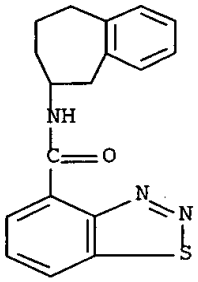


RN 450366-54-8 CAPLUS
CN 3-Pyridinecarboxamide, 6-cyano-N-(6,7,8,9-tetrahydro-5H-

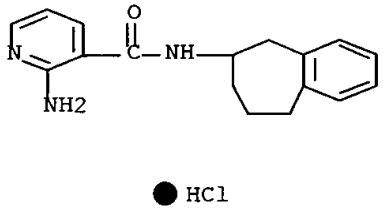
benzocyclohepten-6-
yl)- (9CI) (CA INDEX NAME)



RN 450366-55-9 CAPLUS
CN 1,2,3-Benzothiadiazole-4-carboxamide, N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)

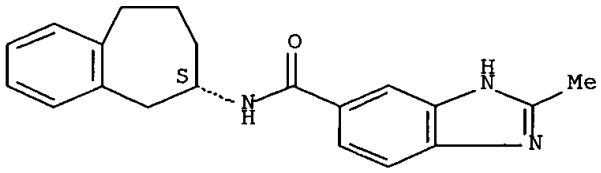


RN 450366-58-2 CAPLUS
CN 3-Pyridinecarboxamide, 2-amino-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-
yl)-, monohydrochloride (9CI) (CA INDEX NAME)



RN 450366-69-5 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-methyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

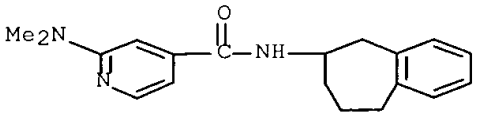


● HCl

RN 450366-75-3 CAPLUS
CN 4-Pyridinecarboxamide, 2-(dimethylamino)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

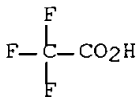
CM 1

CRN 450366-74-2
CMF C19 H23 N3 O

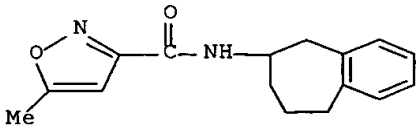


CM 2

CRN 76-05-1
CMF C2 H F3 O2

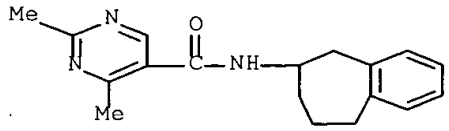


RN 450366-85-5 CAPLUS
CN 3-Isoxazolecarboxamide, 5-methyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)

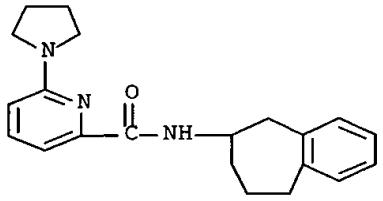


RN 450366-86-6 CAPLUS
CN 5-Pyrimidinecarboxamide, 2,4-dimethyl-N-(6,7,8,9-tetrahydro-5H-

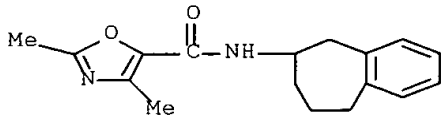
benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450366-87-7 CAPLUS
CN 2-Pyridinecarboxamide, 6-(1-pyrrolidinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



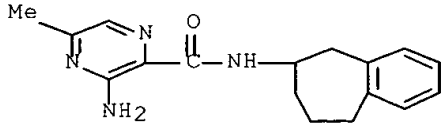
RN 450366-92-4 CAPLUS
CN 5-Oxazolecarboxamide, 2,4-dimethyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450366-94-6 CAPLUS
CN Pyrazinecarboxamide, 3-amino-5-methyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

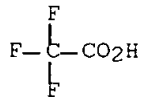
CM 1

CRN 450366-93-5
CMF C17 H20 N4 O



CM 2

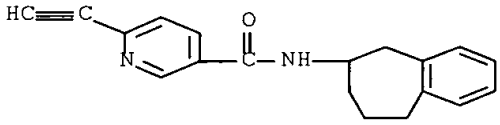
CRN 76-05-1
CMF C2 H F3 O2



RN 450366-96-8 CAPLUS
CN 3-Pyridinecarboxamide, 6-ethynyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-
6-yl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

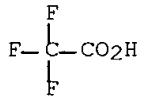
CM 1

CRN 450366-95-7
CMF C19 H18 N2 O



CM 2

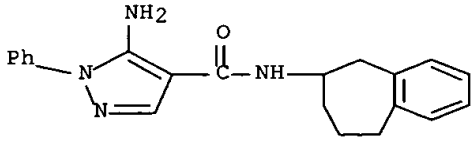
CRN 76-05-1
CMF C2 H F3 O2



RN 450366-98-0 CAPLUS
CN 1H-Pyrazole-4-carboxamide, 5-amino-1-phenyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

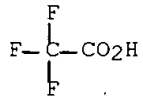
CM 1

CRN 450366-97-9
CMF C21 H22 N4 O

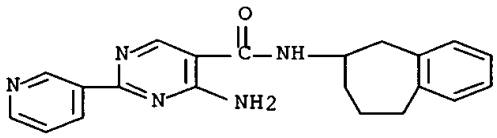


CM 2

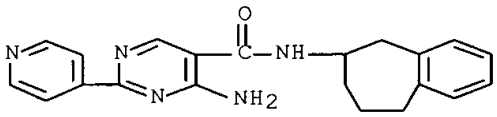
CRN 76-05-1
CMF C2 H F3 O2



RN 450366-99-1 CAPLUS
CN 5-Pyrimidinecarboxamide, 4-amino-2-(3-pyridinyl)-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



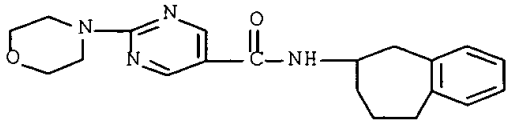
RN 450367-00-7 CAPLUS
CN 5-Pyrimidinecarboxamide, 4-amino-2-(4-pyridinyl)-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450367-02-9 CAPLUS
CN 5-Pyrimidinecarboxamide, 2-(4-morpholinyl)-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

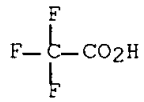
CM 1

CRN 450367-01-8
CMF C20 H24 N4 O2



CM 2

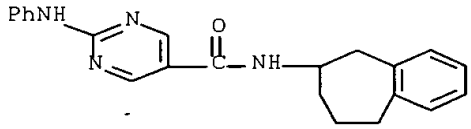
CRN 76-05-1
CMF C2 H F3 O2



RN 450367-04-1 CAPLUS
CN 5-Pyrimidinecarboxamide, 2-(phenylamino)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

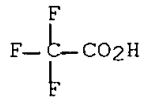
CM 1

CRN 450367-03-0
CMF C22 H22 N4 O

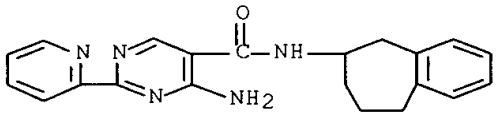


CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 450367-05-2 CAPLUS
CN 5-Pyrimidinecarboxamide, 4-amino-2-(2-pyridinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)

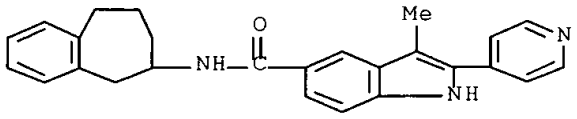


RN 450367-07-4 CAPLUS
CN 1H-Indole-5-carboxamide, 3-methyl-2-(4-pyridinyl)-N-(6,7,8,9-tetrahydro-5H-

benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

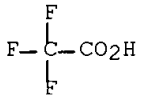
CM 1

CRN 450367-06-3
CMF C26 H25 N3 O



CM 2

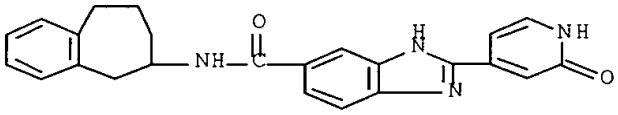
CRN 76-05-1
CMF C2 H F3 O2



RN 450367-09-6 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-(1,2-dihydro-2-oxo-4-pyridinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

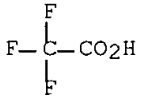
CM 1

CRN 450367-08-5
CMF C24 H22 N4 O2



CM 2

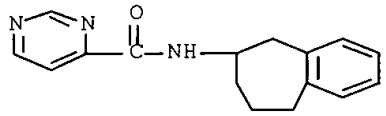
CRN 76-05-1
CMF C2 H F3 O2



RN 450367-11-0 CAPLUS
CN 4-Pyrimidinecarboxamide, N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-,
mono(trifluoroacetate) (9CI) (CA INDEX NAME)

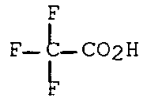
CM 1

CRN 450367-10-9
CMF C16 H17 N3 O



CM 2

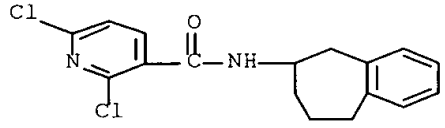
CRN 76-05-1
CMF C2 H F3 O2



RN 450367-13-2 CAPLUS
CN 3-Pyridinecarboxamide, 2,6-dichloro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

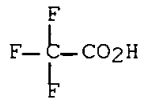
CM 1

CRN 450367-12-1
CMF C17 H16 Cl2 N2 O

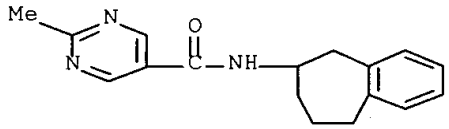


CM 2

CRN 76-05-1
CMF C2 H F3 O2



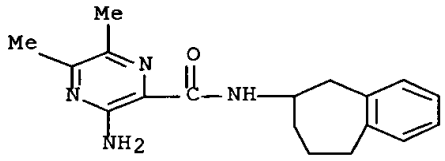
RN 450367-14-3 CAPLUS
CN 5-Pyrimidinecarboxamide, 2-methyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450367-16-5 CAPLUS
CN Pyrazinecarboxamide, 3-amino-5,6-dimethyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

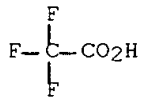
CM 1

CRN 450367-15-4
CMF C18 H22 N4 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

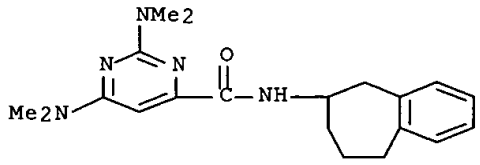


RN 450367-18-7 CAPLUS
CN 4-Pyrimidinecarboxamide, 2,6-bis(dimethylamino)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

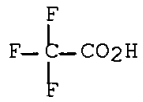
CRN 450367-17-6

CMF C20 H27 N5 O



CM 2

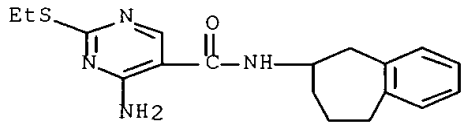
CRN 76-05-1
CMF C2 H F3 O2



RN 450367-20-1 CAPLUS
CN 5-Pyrimidinecarboxamide, 4-amino-2-(ethylthio)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

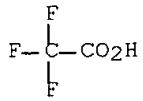
CM 1

CRN 450367-19-8
CMF C18 H22 N4 O S



CM 2

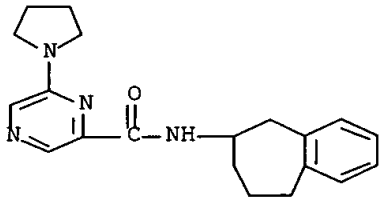
CRN 76-05-1
CMF C2 H F3 O2



RN 450367-22-3 CAPLUS
CN Pyrazinecarboxamide, 6-(1-pyrrolidinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

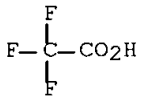
CM 1

CRN 450367-21-2
CMF C20 H24 N4 O



CM 2

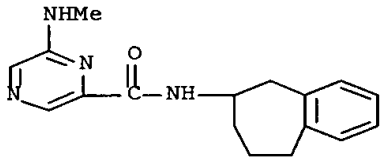
CRN 76-05-1
CMF C2 H F3 O2



RN 450367-24-5 CAPLUS
CN Pyrazinecarboxamide, 6-(methylamino)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

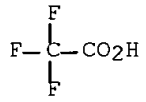
CM 1

CRN 450367-23-4
CMF C17 H20 N4 O

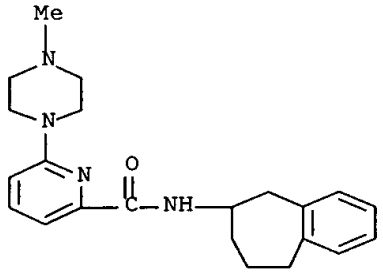


CM 2

CRN 76-05-1
CMF C2 H F3 O2



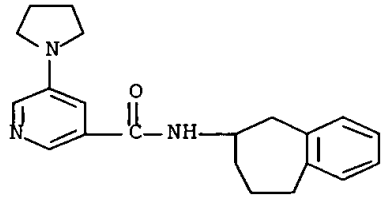
RN 450367-25-6 CAPLUS
CN 2-Pyridinecarboxamide, 6-(4-methyl-1-piperazinyl)-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450367-27-8 CAPLUS
CN 3-Pyridinecarboxamide, 5-(1-pyrrolidinyl)-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

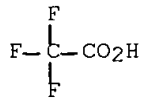
CM 1

CRN 450367-26-7
CMF C21 H25 N3 O

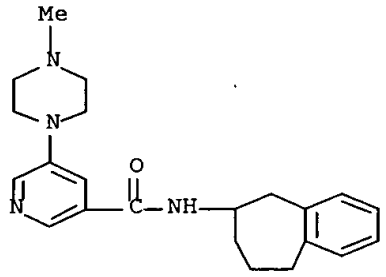


CM 2

CRN 76-05-1
CMF C2 H F3 O2



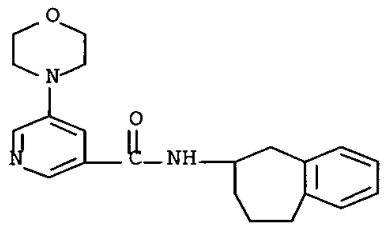
RN 450367-28-9 CAPLUS
CN 3-Pyridinecarboxamide, 5-(4-methyl-1-piperazinyl)-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450367-30-3 CAPLUS
CN 3-Pyridinecarboxamide, 5-(4-morpholinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

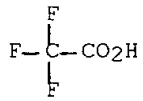
CM 1

CRN 450367-29-0
CMF C21 H25 N3 O2



CM 2

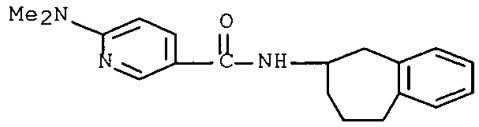
CRN 76-05-1
CMF C2 H F3 O2



RN 450367-32-5 CAPLUS
CN 3-Pyridinecarboxamide, 6-(dimethylamino)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

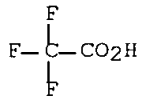
CM 1

CRN 450367-31-4
CMF C19 H23 N3 O



CM 2

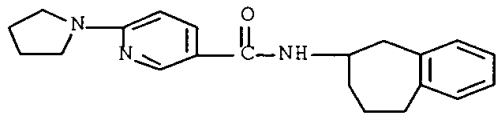
CRN 76-05-1
CMF C2 H F3 O2



RN 450367-34-7 CAPLUS
CN 3-Pyridinecarboxamide, 6-(1-pyrrolidinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

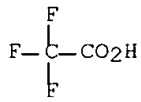
CM 1

CRN 450367-33-6
CMF C21 H25 N3 O



CM 2

CRN 76-05-1
CMF C2 H F3 O2

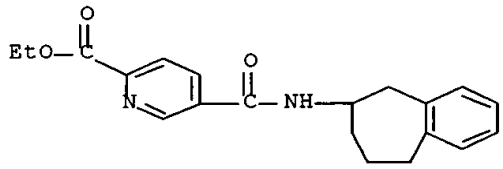


RN 450367-36-9 CAPLUS
CN 2-Pyridinecarboxylic acid, 5-[[(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-

yl)amino]carbonyl]-, ethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

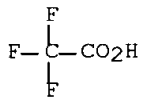
CM 1

CRN 450367-35-8
CMF C20 H22 N2 O3

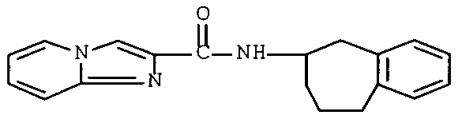


CM 2

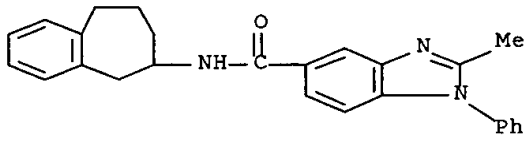
CRN 76-05-1
CMF C2 H F3 O2



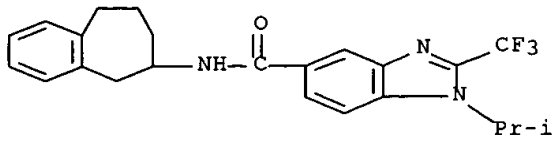
RN 450367-38-1 CAPLUS
CN Imidazo[1,2-a]pyridine-2-carboxamide, N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450367-39-2 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-methyl-1-phenyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



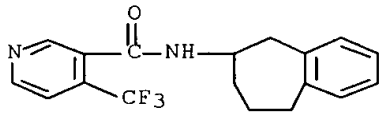
RN 450367-40-5 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 1-(1-methylethyl)-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-6-yl)-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 450367-42-7 CAPLUS
CN 3-Pyridinecarboxamide, N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-4-
(trifluoromethyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

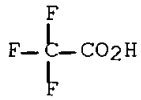
CM 1

CRN 450367-41-6
CMF C18 H17 F3 N2 O

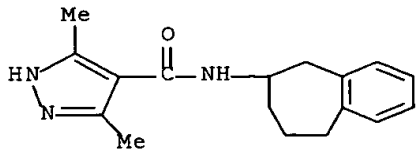


CM 2

CRN 76-05-1
CMF C2 H F3 O2



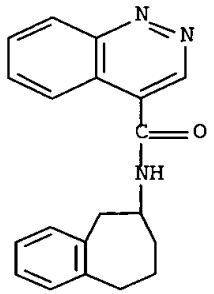
RN 450367-43-8 CAPLUS
CN 1H-Pyrazole-4-carboxamide, 3,5-dimethyl-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450367-45-0 CAPLUS
CN 4-Cinnolinecarboxamide, N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-
,
trifluoroacetate (9CI) (CA INDEX NAME)

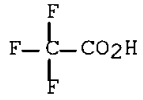
CM 1

CRN 450367-44-9
CMF C20 H19 N3 O



CM 2

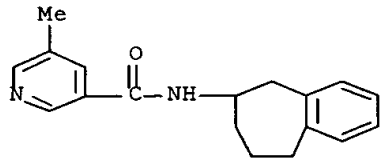
CRN 76-05-1
CMF C2 H F3 O2



RN 450367-47-2 CAPLUS
CN 3-Pyridinecarboxamide, 5-methyl-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-
6-yl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

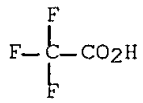
CM 1

CRN 450367-46-1
CMF C18 H20 N2 O

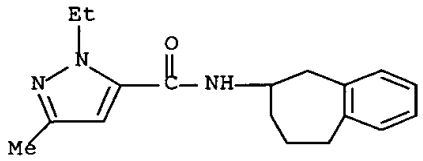


CM 2

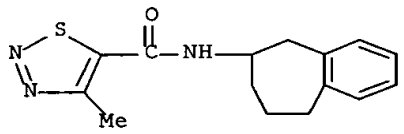
CRN 76-05-1
CMF C2 H F3 O2



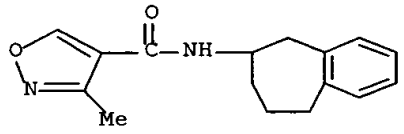
RN 450367-48-3 CAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-ethyl-3-methyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



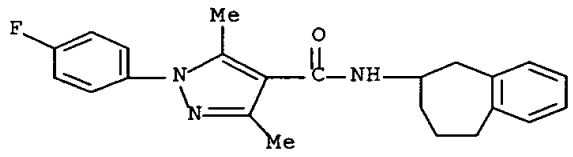
RN 450367-49-4 CAPLUS
CN 1,2,3-Thiadiazole-5-carboxamide, 4-methyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



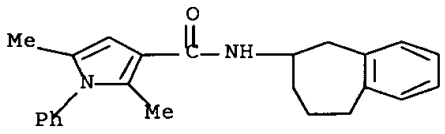
RN 450367-50-7 CAPLUS
CN 4-Isoxazolecarboxamide, 3-methyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



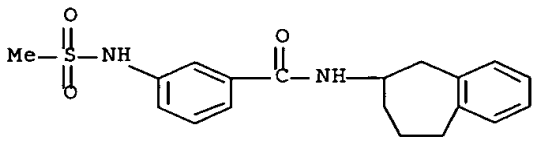
RN 450367-51-8 CAPLUS
CN 1H-Pyrazole-4-carboxamide, 1-(4-fluorophenyl)-3,5-dimethyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



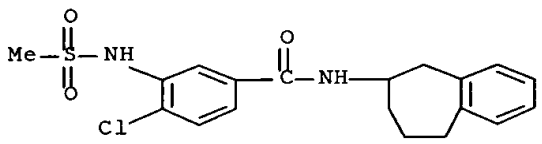
RN 450367-52-9 CAPLUS
CN 1H-Pyrrole-3-carboxamide, 2,5-dimethyl-1-phenyl-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



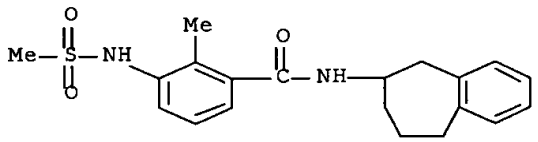
RN 450367-53-0 CAPLUS
CN Benzamide, 3-[(methylsulfonyl)amino]-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450367-54-1 CAPLUS
CN Benzamide, 4-chloro-3-[(methylsulfonyl)amino]-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



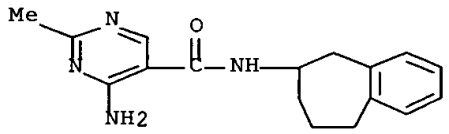
RN 450367-55-2 CAPLUS
CN Benzamide, 2-methyl-3-[(methylsulfonyl)amino]-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450367-57-4 CAPLUS
CN 5-Pyrimidinecarboxamide, 4-amino-2-methyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

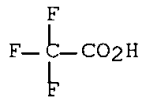
CM 1

CRN 450367-56-3
CMF C17 H20 N4 O



CM 2

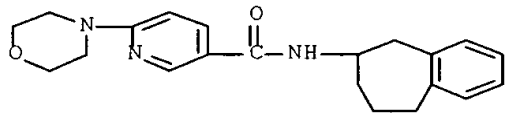
CRN 76-05-1
CMF C2 H F3 O2



RN 450367-59-6 CAPLUS
CN 3-Pyridinecarboxamide, 6-(4-morpholinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

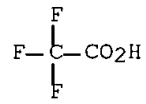
CM 1

CRN 450367-58-5
CMF C21 H25 N3 O2



CM 2

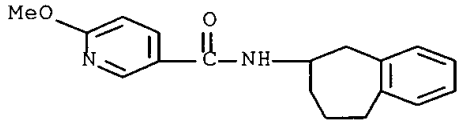
CRN 76-05-1
CMF C2 H F3 O2



RN 450367-61-0 CAPLUS
CN 3-Pyridinecarboxamide, 6-methoxy-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-
6-yl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

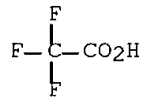
CM 1

CRN 450367-60-9
CMF C18 H20 N2 O2

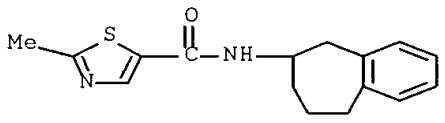


CM 2

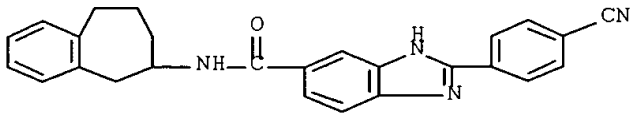
CRN 76-05-1
CMF C2 H F3 O2



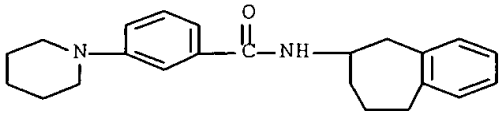
RN 450367-64-3 CAPLUS
CN 5-Thiazolecarboxamide, 2-methyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-
6-yl)- (9CI) (CA INDEX NAME)



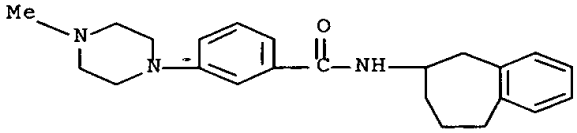
RN 450367-65-4 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-(4-cyanophenyl)-N-(6,7,8,9-tetrahydro-5H-
benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



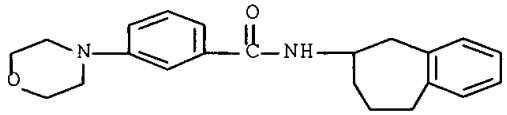
RN 450367-66-5 CAPLUS
CN Benzamide, 3-(1-piperidinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-
yl)- (9CI) (CA INDEX NAME)



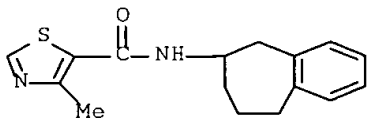
RN 450367-67-6 CAPLUS
CN Benzamide, 3-(4-methyl-1-piperazinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450367-68-7 CAPLUS
CN Benzamide, 3-(4-morpholinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-
yl)- (9CI) (CA INDEX NAME)



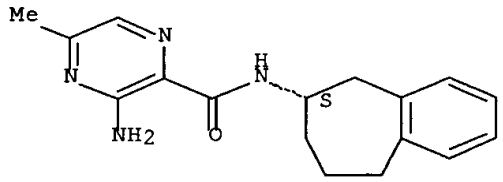
RN 450367-69-8 CAPLUS
CN 5-Thiazolecarboxamide, 4-methyl-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-
6-yl)- (9CI) (CA INDEX NAME)



RN 450367-74-5 CAPLUS

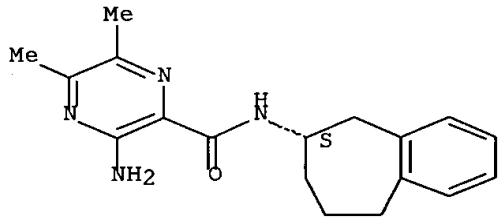
CN Pyrazinecarboxamide, 3-amino-5-methyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



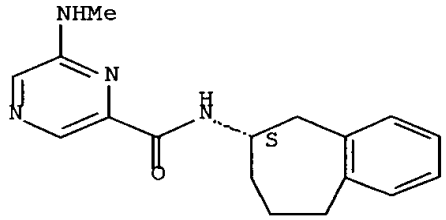
RN 450367-75-6 CAPLUS
CN Pyrazinecarboxamide, 3-amino-5,6-dimethyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



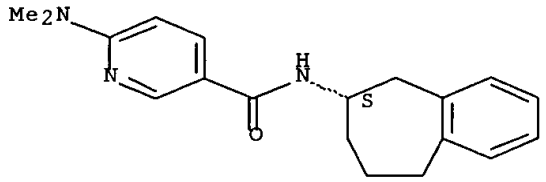
RN 450367-76-7 CAPLUS
CN Pyrazinecarboxamide, 6-(methylamino)-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



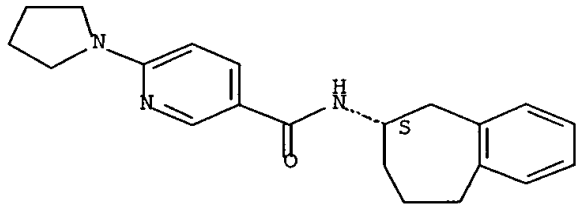
RN 450367-77-8 CAPLUS
CN 3-Pyridinecarboxamide, 6-(dimethylamino)-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



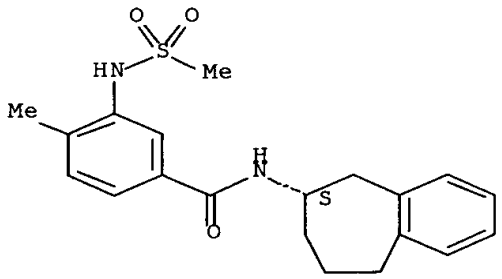
RN 450367-78-9 CAPLUS
CN 3-Pyridinecarboxamide, 6-(1-pyrrolidinyl)-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



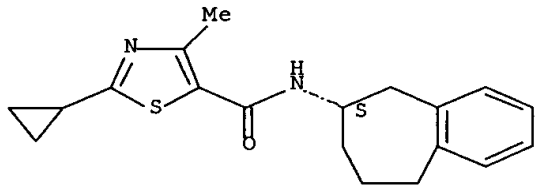
RN 450367-79-0 CAPLUS
CN Benzamide, 4-methyl-3-[(methylsulfonyl)amino]-N-[(6S)-6,7,8,9-tetrahydro-
5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



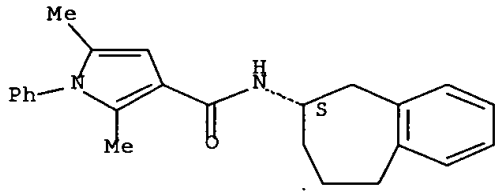
RN 450367-80-3 CAPLUS
CN 5-Thiazolecarboxamide, 2-cyclopropyl-4-methyl-N-[(6S)-6,7,8,9-tetrahydro-
5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



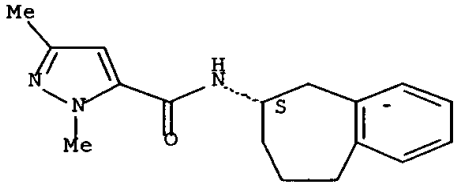
RN 450367-81-4 CAPLUS
CN 1H-Pyrrole-3-carboxamide, 2,5-dimethyl-1-phenyl-N-[(6S)-6,7,8,9-tetrahydro-
5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



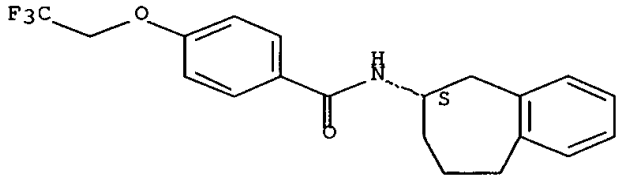
RN 450367-82-5 CAPLUS
CN 1H-Pyrazole-5-carboxamide, 1,3-dimethyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



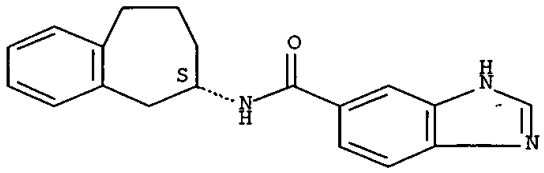
RN 450367-85-8 CAPLUS
CN Benzamide, N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]-4-(2,2,2-
trifluoroethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

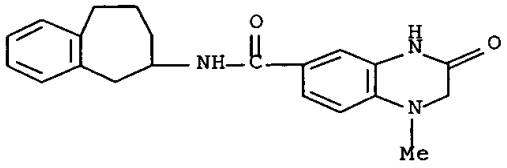


RN 450367-86-9 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

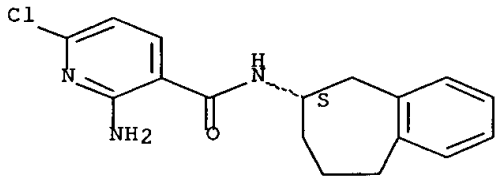


RN 450367-87-0 CAPLUS
CN 6-Quinoxalinecarboxamide, 1,2,3,4-tetrahydro-1-methyl-3-oxo-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



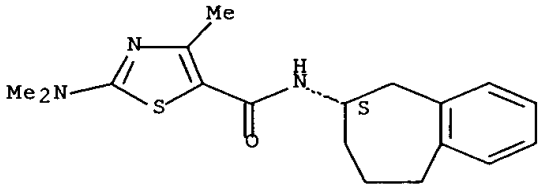
RN 450367-88-1 CAPLUS
CN 3-Pyridinecarboxamide, 2-amino-6-chloro-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



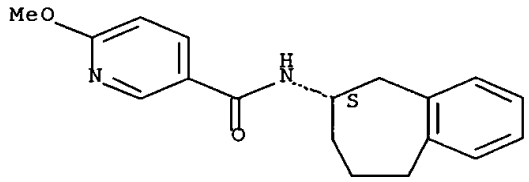
RN 450367-89-2 CAPLUS
CN 5-Thiazolecarboxamide, 2-(dimethylamino)-4-methyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



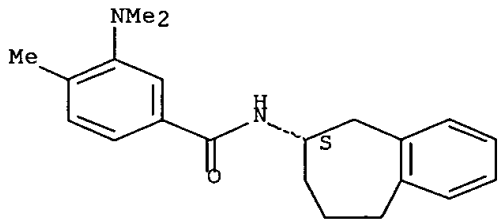
RN 450367-90-5 CAPLUS
CN 3-Pyridinecarboxamide, 6-methoxy-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



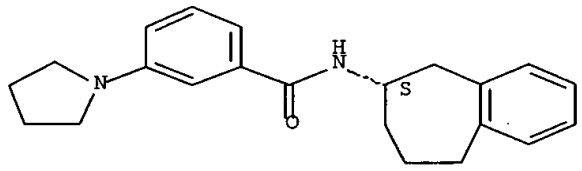
RN 450367-91-6 CAPLUS
CN Benzamide, 3-(dimethylamino)-4-methyl-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



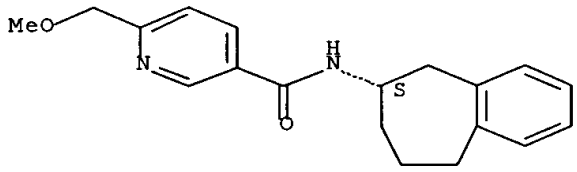
RN 450367-92-7 CAPLUS
CN Benzamide, 3-(1-pyrrolidinyl)-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 450367-93-8 CAPLUS
CN 3-Pyridinecarboxamide, 6-(methoxymethyl)-N-[(6S)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

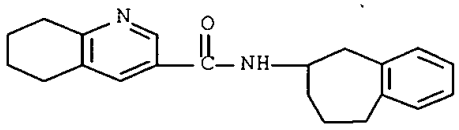
Absolute stereochemistry.



RN 450367-95-0 CAPLUS
CN 3-Quinolinecarboxamide, 5,6,7,8-tetrahydro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

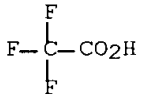
CM 1

CRN 450367-94-9
CMF C21 H24 N2 O

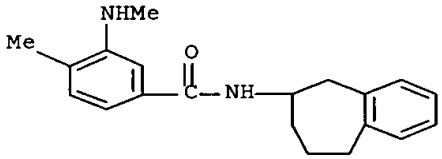


CM 2

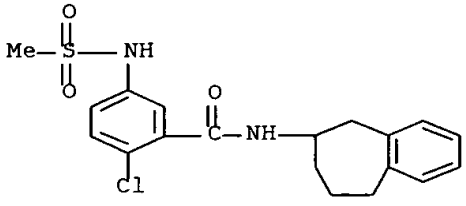
CRN 76-05-1
CMF C2 H F3 O2



RN 450367-96-1 CAPLUS
CN Benzamide, 4-methyl-3-(methylamino)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



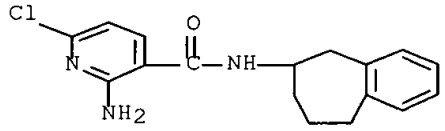
RN 450367-97-2 CAPLUS
CN Benzamide, 2-chloro-5-[(methylsulfonyl)amino]-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450367-99-4 CAPLUS
CN 3-Pyridinecarboxamide, 2-amino-6-chloro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

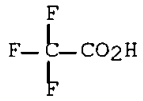
CM 1

CRN 450367-98-3
CMF C17 H18 Cl N3 O



CM 2

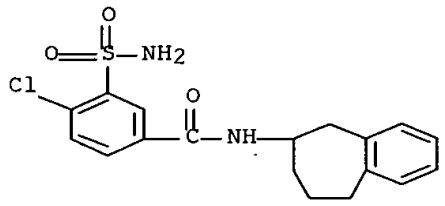
CRN 76-05-1
CMF C2 H F3 O2



RN 450368-01-1 CAPLUS
CN Benzamide, 3-(aminosulfonyl)-4-chloro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

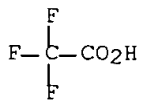
CM 1

CRN 450368-00-0
CMF C18 H19 Cl N2 O3 S

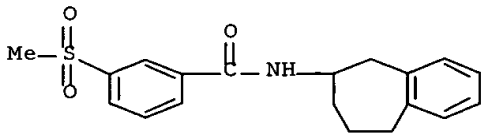


CM 2

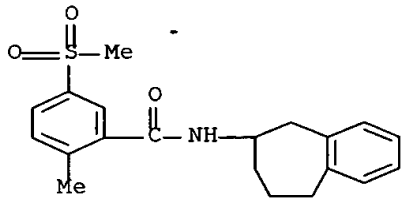
CRN 76-05-1
CMF C2 H F3 O2



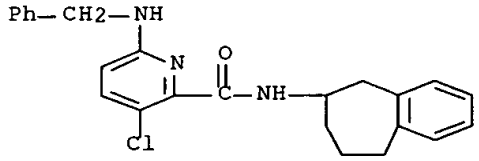
RN 450368-02-2 CAPLUS
CN Benzamide, 3-(methylsulfonyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-
yl)- (9CI) (CA INDEX NAME)



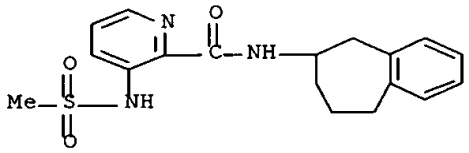
RN 450368-03-3 CAPLUS
CN Benzamide, 2-methyl-5-(methylsulfonyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



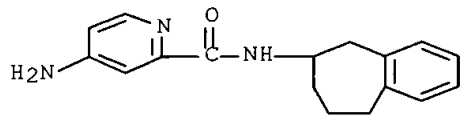
RN 450368-08-8 CAPLUS
CN 2-Pyridinecarboxamide, 3-chloro-6-[(phenylmethyl)amino]-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450368-10-2 CAPLUS
CN 2-Pyridinecarboxamide, 3-[(methylsulfonyl)amino]-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)

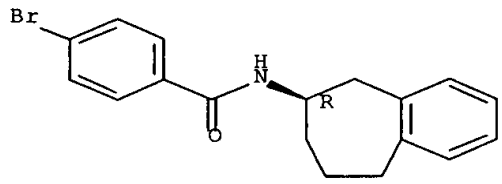


RN 450368-11-3 CAPLUS
CN 2-Pyridinecarboxamide, 4-amino-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



RN 450368-12-4 CAPLUS
CN Benzamide, 4-bromo-N-[(6R)-6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl]- (9CI) (CA INDEX NAME)

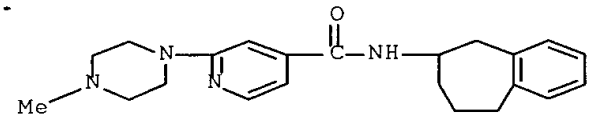
Absolute stereochemistry. Rotation (+).



RN 450368-14-6 CAPLUS
CN 4-Pyridinecarboxamide, 2-(4-methyl-1-piperazinyl)-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)-, trifluoroacetate (9CI) (CA INDEX NAME)

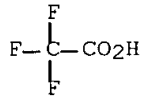
CM 1

CRN 450368-13-5
CMF C22 H28 N4 O

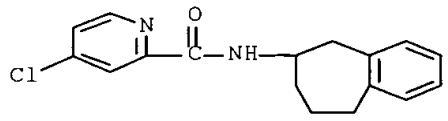


CM 2

CRN 76-05-1
CMF C2 H F3 O2

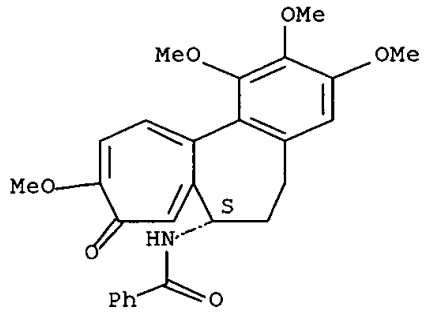


IT **450368-06-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; prepn. of acylated tetrahydrobenzocycloheptenylamines as stimulators of endothelial NO-synthase transcription)
RN 450368-06-6 CAPLUS
CN 2-Pyridinecarboxamide, 4-chloro-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)



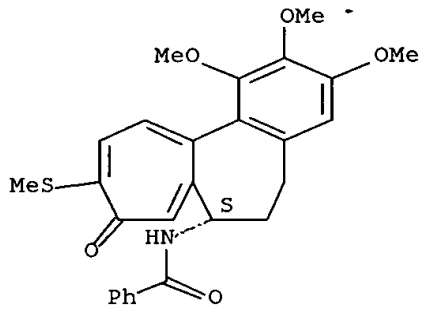
L10 ANSWER 3 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 2002:59014 CAPLUS
DN 136:288676
TI Mining the National Cancer Institute's Tumor-Screening Database: Identification of Compounds with Similar Cellular Activities
AU Rabow, Alfred A.; Shoemaker, Robert H.; Sausville, Edward A.; Covell, David G.
CS Developmental Therapeutics Program, DCTD, Science Applications International Corporation, National Cancer Institute, NIH, Frederick, MD, 21702, USA
SO Journal of Medicinal Chemistry (2002), 45(4), 818-840
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
AB In an effort to enhance access to information available in the National Cancer Institute's (NCI) anticancer drug-screening database, a new suite of Internet accessible (http://spheroid. ncifcrf.gov) computational tools has been assembled for self-organizing map-based (SOM) cluster anal. and data visualization. A range of anal. questions were initially addressed to evaluate improvements in SOM cluster quality based on the data-conditioning procedures of Z-score normalization, capping, and treatment of missing data as well as completeness of drug cell-screening data. These studies established a foundation for SOM cluster anal. of the complete set of NCI's publicly available antitumor drug-screening data. This anal. identified relationships between chemotypes of screened agents and their effect on four major classes of cellular activities:mitosis, nucleic acid synthesis, membrane transport and integrity, and phosphatase- and kinase-mediated cell cycle regulation. Validations of these cellular activities, obtained from literature sources, found (i) strong evidence supporting within cluster memberships and shared cellular activity, (ii) indications of compd. selectivity between various types of cellular activity, and (iii) strengths and weaknesses of the NCI's antitumor drug screen data for assigning compds. to these classes of cellular activity. Subsequent analyses of averaged responses within these tumor panel types find a strong dependence on chemotype for coherence among cellular response patterns. The advantages of a global anal. of the complete screening data set are discussed.
IT **63989-75-3**, NSC 33410
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(NSC 33410; mining National Cancer Institute's tumor-screening database and identification of compds. with similar cellular activities)
RN 63989-75-3 CAPLUS
CN Benzamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



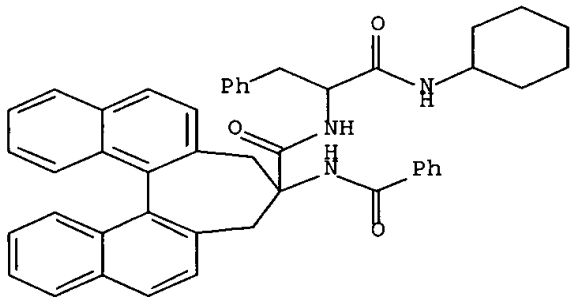
IT **63620-47-3**, NSC 366078
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(mining National Cancer Institute's tumor-screening database and identification of compds. with similar cellular activities)
RN 63620-47-3 CAPLUS
CN Benzamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-
oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 116 THERE ARE 116 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

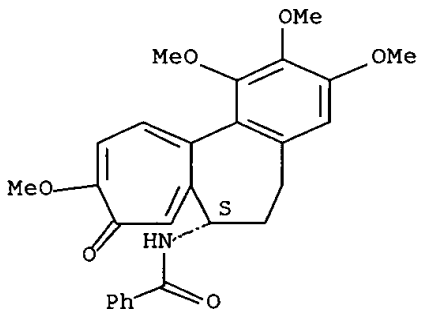
L10 ANSWER 4 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 2001:176663 CAPLUS
DN 134:340698
TI A chirally stable, atropoisomeric, C.alpha.-tetrasubstituted .alpha.-amino acid: incorporation into model peptides and conformational preference
AU Formaggio, Fernando; Peggion, Cristina; Crisma, Marco; Toniolo, Claudio; Tchertanov, Luba; Guilhem, Jean; Mazaleyrat, Jean-Paul; Goubard, Yolaine; Gaucher, Anne; Wakselman, Michel
CS Biopolymer Research Centre, CNR, Department of Organic Chemistry, University of Padova, Padua, I-35131, Italy
SO Helvetica Chimica Acta (2001), 84(2), 481-501
CODEN: HCACAV; ISSN: 0018-019X
PB Verlag Helvetica Chimica Acta
DT Journal
LA English
OS CASREACT 134:340698
AB A variety of model peptides, including four complete homologous series, to the pentamer level, characterized by the recently proposed binaphthyl-based, axially chiral, C.alpha.-tetrasubstituted, cyclic .alpha.-amino acid Bin (Bin = 4,5-dihydro-4-amino-3H-cyclohepta[2,1-.alpha.:3,4-.alpha.']dinaphthalene-4-carboxylic acid), in combination with Ala, Gly, or Aib (Aib = 2-aminoisobutanoyl) residues, was synthesized by soln. methods and fully characterized. The soln. conformational propensity of these peptides was detd. by FT-IR absorption and 1H-NMR techniques. Moreover, the mol. structures of the free amino acid (S)-enantiomer and an N.alpha.-acylated dipeptide alkylamide with the heterochiral sequence -(R)-Bin-Phe- were assessed in the crystal state by X-ray diffraction. Taken together, the results point to the conclusion that .beta.-bends and 310 helixes are preferentially adopted by Bin-contg. peptides, although the fully extended conformation would also be adopted in soln. by the short oligomers to some extent. We also confirmed the tendency of (R)-Bin to fold a peptide chain into right-handed bend and helical structures. The abs. configuration of the Bin residue(s) was correlated with the typically intense exciton-split Cotton effect of the 1Bb binaphthyl transition near 225 nm.
IT **214190-12-2P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and conformation of peptides contg. tetrasubstituted amino acid)
RN 214190-12-2 CAPLUS
CN 3H-Cyclohepta[2,1-a:3,4-a']dinaphthalene-4-carboxamide, 4-(benzoylamino)-N-[(1S)-2-(cyclohexylamino)-2-oxo-1-(phenylmethyl)ethyl]-4,5-dihydro-, (11bR)- (9CI) (CA INDEX NAME)



RE.CNT 73 THERE ARE 73 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 2000:488523 CAPLUS
DN 133:217357
TI Characterization of anticancer agents by their growth inhibitory activity
and relationships to mechanism of action and structure
AU Keskin, Ozlem; Bahar, Ivet; Jernigan, Robert L.; Beutler, John A.; Shoemaker, Robert H.; Sausville, Edward A.; Covell, David G.
CS Chemical Engineering Department and Polymer Research Center, TUBITAK Advanced Polymeric Materials Research Center, Bogazici University, Istanbul, 80815, Turk.
SO Anti-Cancer Drug Design (2000), 15(2), 79-98
CODEN: ACDDEA; ISSN: 0266-9536
PB Oxford University Press
DT Journal
LA English
AB An anal. of the growth inhibitory potency of 122 anticancer agents available from the National Cancer Institute anticancer drug screen is presented. Methods of singular value decompn. (SVD) were applied to det.
the matrix of distances between all compds. These SVD-derived dissimilarity distances were used to cluster compds. that exhibit similar
tumor growth inhibitory activity patterns against 60 human cancer cell lines. Cluster anal. divides the 122 std. agents into 25 statistically distinct groups. The first eight groups include structurally diverse compds. with reactive functionalities that act as DNA-damaging agents. while the remaining 17 groups include compds. that inhibit nucleic acid biosynthesis and mitosis. Examn. of the av. activity patterns across the
60 tumor cell lines reveals unique "fingerprints" assocd. with each group.
A diverse set of structural features are obsd. for compds. within these groups, with frequent occurrences of strong within-group structural similarities. Clustering of cell types by their response to the 122 anticancer agents divides the 60 cell types into 21 groups. The strongest
within-panel groupings were found for the renal, leukemia and ovarian cell
panels. These results contribute to the basis for comparisons between log(GI50) screening patterns of the 122 anticancer agents and addnl. tested compds.
IT **63989-75-3**, NSC 33410
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); BIOL (Biological study)
(characterization of anticancer agents by growth inhibitory activity and relationships to mechanism of action and structure)
RN 63989-75-3 CAPLUS
CN Benzamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

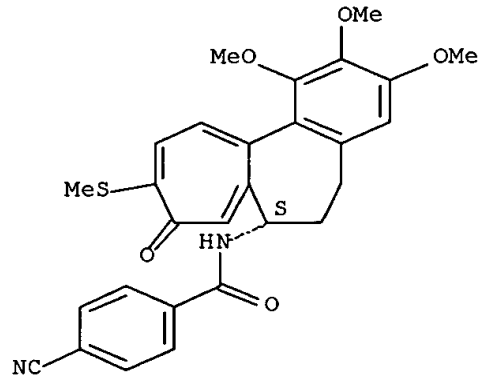
Absolute stereochemistry.



RE.CNT 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

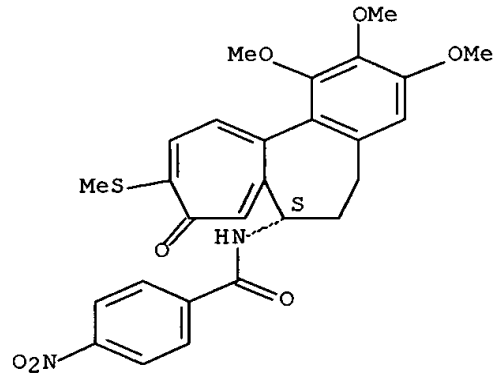
L10 ANSWER 6 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 2000:13115 CAPLUS
DN 132:189292
TI Antitumor Agents. 199.Three-Dimensional Quantitative Structure-Activity Relationship Study of the Colchicine Binding Site Ligands Using Comparative Molecular Field Analysis
AU Zhang, Shun-Xiang; Feng, Jun; Kuo, Sheng-Chu; Brossi, Arnold; Hamel, Ernest; Tropsha, Alexander; Lee, Kuo-Hsiung
CS Natural Products Laboratory and the Laboratory for Molecular Modeling School of Pharmacy, University of North Carolina at Chapel Hill, Chapel Hill, NC, 27599, USA
SO Journal of Medicinal Chemistry (2000), 43(2), 167-176
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
AB Inhibitors of tubulin polymn. interacting at the colchicine binding site are potential anticancer agents. We have been involved in the synthesis of a no. of colchicine site agents, such as thiocolchicinoids and allocolchicinoids, which are colchicine analogs, and 2-phenyl-quinolones and 2-aryl-naphthyridinones, which are the amino analogs of cytotoxic antimitotic flavonoids. The most cytotoxic of the latter compds. strongly inhibit binding of radiolabeled colchicine to tubulin, and these agents therefore probably bind in the colchicine site of tubulin. We have applied conventional CoMFA and q2-GRS CoMFA to identify the essential structural requirements for increasing the ability of these compds. to form tubulin complexes. The CoMFA model for the training set of 51 compds. yielded cross-validated R2 (q2) values of 0.637 for conventional CoMFA and 0.692 for q2-GRS CoMFA. The predictive power of this model was confirmed by successful activity prediction for a test set of 53 compds. with known potencies as inhibitors of tubulin polymn. The activities of 88% of the compds. were predicted with abs. value of residuals of less than 0.5. The predictive q2 values were 0.546 for conventional CoMFA and 0.426 for q2-GRS CoMFA. The conventional CoMFA model with the highest predictive q2 (0.546) was analyzed in detail in terms of underlying structure-activity relationships.
IT **147950-68-3 147950-72-9 147950-73-0**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(QSAR study of colchicine binding site ligands using CoMFA)
RN 147950-68-3 CAPLUS
CN Benzamide, 4-cyano-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



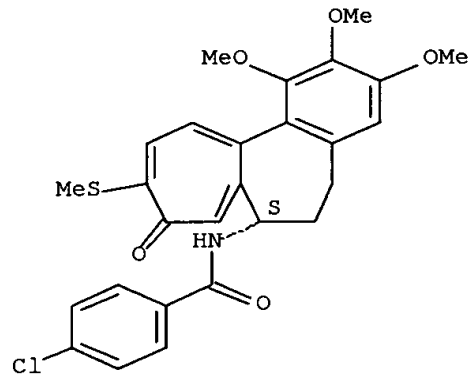
RN 147950-72-9 CAPLUS
CN Benzamide, 4-nitro-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



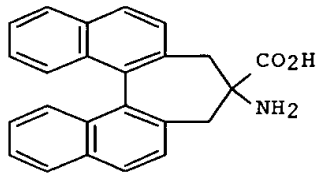
RN 147950-73-0 CAPLUS
CN Benzamide, 4-chloro-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 7 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1998:593318 CAPLUS
DN 129:290392
TI Practical resolution of an atropoisomeric .alpha.,.alpha.-disubstituted glycine with L-phenylalanine cyclohexylamide as chiral auxiliary
AU Mazaleyrat, Jean-Paul; Boutboul, Aurelia; Lebars, Yann; Gaucher, Anne; Wakselman, Michel
CS SIRCOB, Bat. Lavoisier, Universite de Versailles, Versailles, 78035, Fr.
SO Tetrahedron: Asymmetry (1998), 9(15), 2701-2713
CODEN: TASYE3; ISSN: 0957-4166
PB Elsevier Science Ltd.
DT Journal
LA English
GI

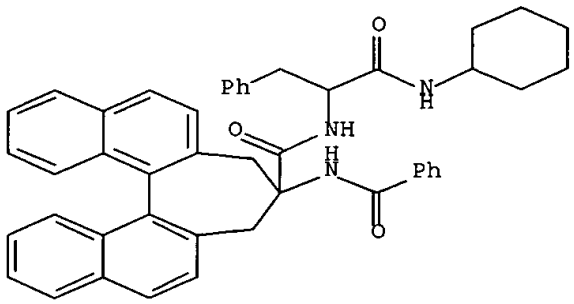


I

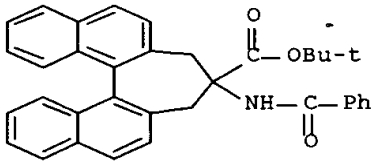
AB L-Phenylalanine cyclohexylamide has been used as a chiral auxiliary for the medium-scale resoln. ".alpha.,.alpha.-disubstituted binaphthyl amiño acid I (Bin) contg. only axial dissymmetry. Coupling of X-Bin-OH (X = Ac, Bz) with H-L-Phe-NH-C6H11 by the EDC/HOBt method gave the dipeptide diastereoisomers X-(R)-Bin-L-Phe-NH-C6H11 and X-(S)-Bin-L-Phe-NH-C6H11, which were sepd. by crystn. (X = Bz) and/or chromatog. Extensive acidic hydrolysis, followed by esterification of the resulting free amino acid enantiomers, led to enantiomerically pure (-)-(R)-H-Bin-OMe and (+)-(S)-H-Bin-OMe in high yields.

IT **214190-12-2P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(practical resoln. of atropoisomeric binaphthyl amino acid with phenylalanine cyclohexylamide as chiral auxiliary)

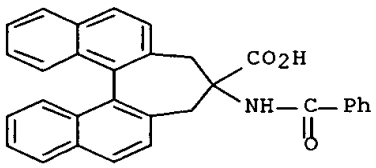
RN 214190-12-2 CAPLUS
CN 3H-Cyclohepta[2,1-a:3,4-a']dinaphthalene-4-carboxamide, 4-(benzoylamino)-N-[(1S)-2-(cyclohexylamino)-2-oxo-1-(phenylmethyl)ethyl]-4,5-dihydro-, (11bR)- (9CI) (CA INDEX NAME)



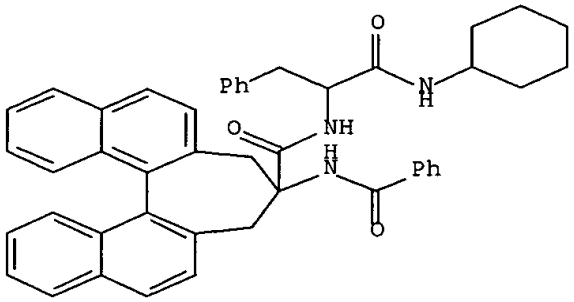
IT **214065-02-8P 214065-06-2P 214190-16-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT
(Reactant or reagent)
(practical resoln. of atropoisomeric binaphthyl amino acid with phenylalanine cyclohexylamide as chiral auxiliary)
RN 214065-02-8 CAPLUS
CN 3H-Cyclohepta[2,1-a:3,4-a']dinaphthalene-4-carboxylic acid, 4-(benzoylamino)-4,5-dihydro-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 214065-06-2 CAPLUS
CN 3H-Cyclohepta[2,1-a:3,4-a']dinaphthalene-4-carboxylic acid, 4-(benzoylamino)-4,5-dihydro- (9CI) (CA INDEX NAME)



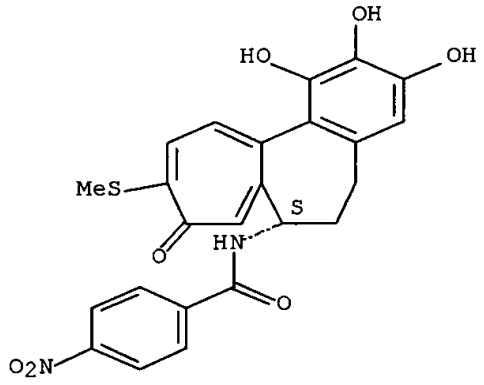
RN 214190-16-6 CAPLUS
CN 3H-Cyclohepta[2,1-a:3,4-a']dinaphthalene-4-carboxamide, 4-(benzoylamino)-N-[(1S)-2-(cyclohexylamino)-2-oxo-1-(phenylmethyl)ethyl]-4,5-dihydro-, (11bS)- (9CI) (CA INDEX NAME)



RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 8 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1998:270002 CAPLUS
DN 128:278756
TI Antitumor Agents. 185. Synthesis and Biological Evaluation of Tridemethylthiocolchicine Analogs as Novel Topoisomerase II Inhibitors
AU Guan, Jian; Zhu, Xiao K.; Tachibana, Yoko; Bastow, Kenneth F.; Brossi, Arnold; Hamel, Ernest; Lee, Kuo-Hsiung
CS Natural Products Laboratory Division of Medicinal Chemistry and Natural Products School of Pharmacy, University of North Carolina, Chapel Hill, NC, 27599, USA
SO Journal of Medicinal Chemistry (1998), 41(11), 1956-1961
CODEN: JMCMAR; ISSN: 0022-2623
PB American Chemical Society
DT Journal
LA English
AB Several 1,2,3-tridemethyldeacetylthiocolchicine derivs. have been synthesized and evaluated for cytotoxic activity against various human tumor cell lines and for their inhibitory effects on DNA topoisomerases in vitro. Exhaustive demethylation of thiocolchicine analogs completely changes their biol. profiles. Instead of displaying antitubulin activity, most target compds. inhibited topoisomerase II activity. Only compds. with a larger side chain, such as 15a, 23a, and 24a, did not interfere with topoisomerase II enzymic functions. The cytotoxicity of target compds. was reduced by 3 orders of magnitude compared to that of colchicine in most cell lines. The hydrophilicity of phenolic compds. might prevent drug passage through the cell plasma membrane and, thus, be responsible for the relatively weak cytotoxicity. To test this hypothesis, 27-30 were prepd. from 16a by protecting all hydroxy groups with esters with an aim to facilitate drug transportation. In vitro cytotoxicity assays indicated that 27 was more potent than its parent compd. in all tested tumor cell lines and showed tissue selective cytotoxicity with a significant inhibitory effect against KB cells (IC50 = 2.7 .mu.g/mL). Therefore, we propose that 27 acts as a prodrug, liberating 16a to exert its antitopoisomerase activity and, finally, to cause cell death.
IT **205804-95-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and biol. evaluation of tridemethylthiocolchicine analogs as topoisomerase II inhibitors)
RN 205804-95-1 CAPLUS
CN Benzamide, 4-nitro-N-[5,6,7,9-tetrahydro-1,2,3-trihydroxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

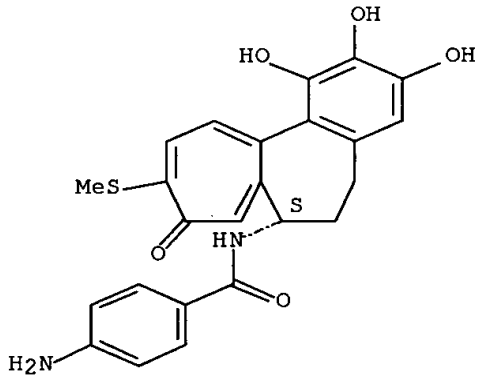


IT **205804-92-8P 205804-93-9P 205804-96-2P**
205804-97-3P 205804-99-5P 205805-01-2P
205805-02-3P 205805-06-7P 205805-08-9P
205805-09-0P 205805-10-3P 205805-11-4P
205805-12-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); BIOL (Biological
study); PREP (Preparation)
(prepn. and biol. evaluation of tridemethylthiocolchicine analogs as topoisomerase II inhibitors)

RN 205804-92-8 CAPLUS

CN Benzamide, 4-amino-N-[5,6,7,9-tetrahydro-1,2,3-trihydroxy-10-(methylthio)-
9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

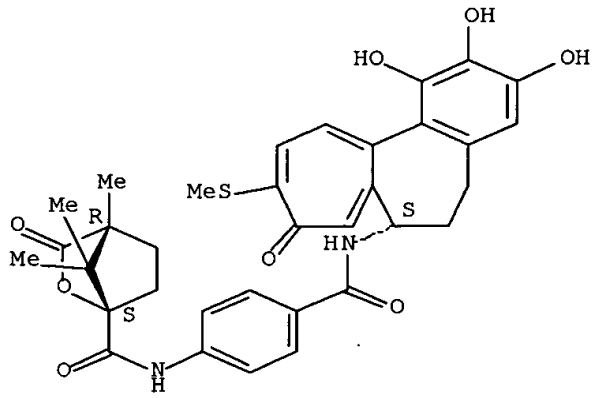
Absolute stereochemistry. Rotation (-).



RN 205804-93-9 CAPLUS

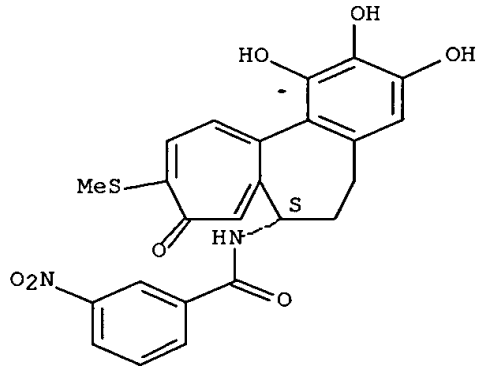
CN 2-Oxabicyclo[2.2.1]heptane-1-carboxamide, 4,7,7-trimethyl-3-oxo-N-[4-[[[5,6,7,9-tetrahydro-1,2,3-trihydroxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]amino]carbonyl]phenyl]-, [1S-[1.alpha.(R*),4.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



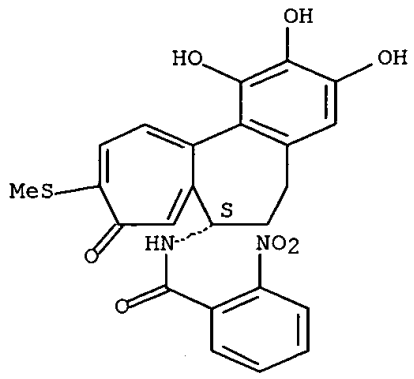
RN 205804-96-2 CAPLUS
CN Benzamide, 3-nitro-N-[5,6,7,9-tetrahydro-1,2,3-trihydroxy-10-(methylthio)-
9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



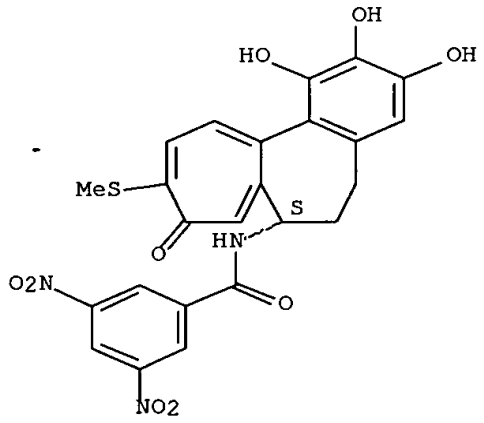
RN 205804-97-3 CAPLUS
CN Benzamide, 2-nitro-N-[5,6,7,9-tetrahydro-1,2,3-trihydroxy-10-(methylthio)-
9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



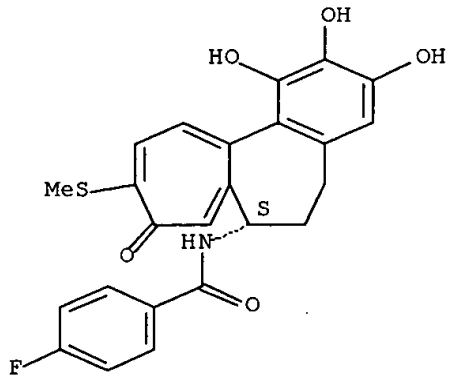
RN 205804-99-5 CAPLUS
CN Benzamide, 3,5-dinitro-N-[5,6,7,9-tetrahydro-1,2,3-trihydroxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



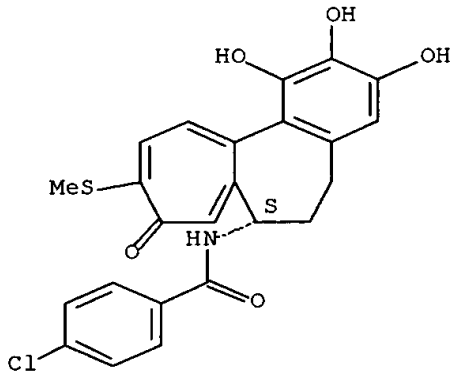
RN 205805-01-2 CAPLUS
CN Benzamide, 4-fluoro-N-[5,6,7,9-tetrahydro-1,2,3-trihydroxy-10-(methylthio)-
9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



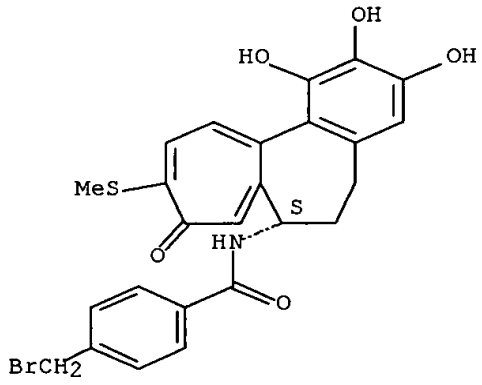
RN 205805-02-3 CAPLUS
CN Benzamide, 4-chloro-N-[5,6,7,9-tetrahydro-1,2,3-trihydroxy-10-(methylthio)-
9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



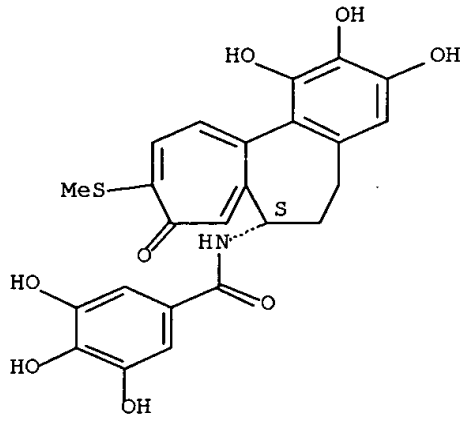
RN 205805-06-7 CAPLUS
CN Benzamide, 4-(bromomethyl)-N-[5,6,7,9-tetrahydro-1,2,3-trihydroxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



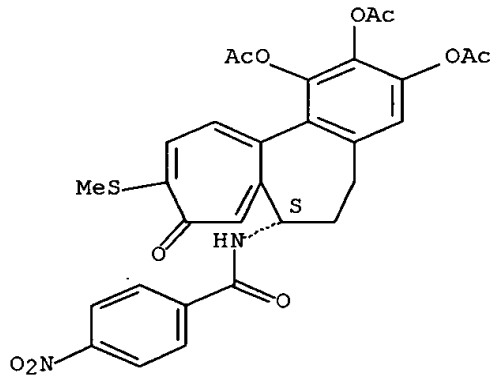
RN 205805-08-9 CAPLUS
CN Benzamide, 3,4,5-trihydroxy-N-[5,6,7,9-tetrahydro-1,2,3-trihydroxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



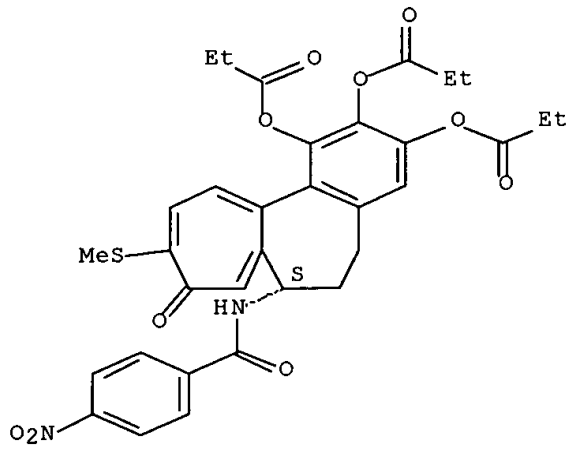
RN 205805-09-0 CAPLUS
CN Benzamide, 4-nitro-N-[1,2,3-tris(acetyloxy)-5,6,7,9-tetrahydro-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



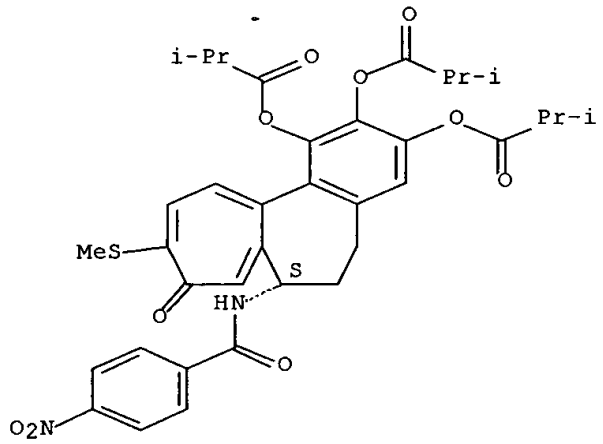
RN 205805-10-3 CAPLUS
CN Benzamide, 4-nitro-N-[5,6,7,9-tetrahydro-10-(methylthio)-9-oxo-1,2,3-tris(1-oxopropoxy)benzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



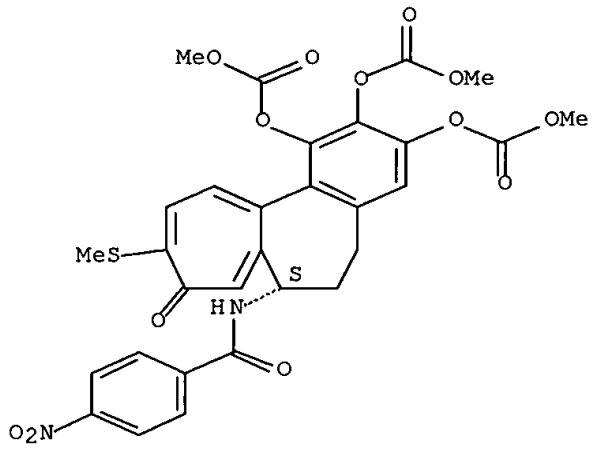
RN 205805-11-4 CAPLUS
CN Propanoic acid, 2-methyl-, 5,6,7,9-tetrahydro-10-(methylthio)-7-[(4-nitrobenzoyl)amino]-9-oxobenzo[a]heptalene-1,2,3-triyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 205805-12-5 CAPLUS
CN Carbonic acid, 5,6,7,9-tetrahydro-10-(methylthio)-7-[(4-nitrobenzoyl)amino]-9-oxobenzo[a]heptalene-1,2,3-triyl trimethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

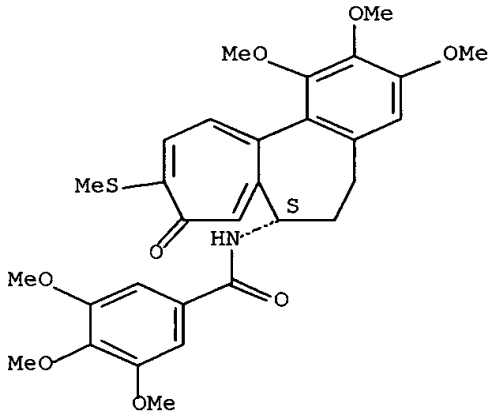


IT **103591-54-4 107277-91-8 147950-67-2**
147950-71-8 147950-72-9 147950-73-0
205804-94-0 205804-98-4 205805-00-1
205805-07-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and biol. evaluation of tridemethylthiocolchicine analogs as topoisomerase II inhibitors)

RN 103591-54-4 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

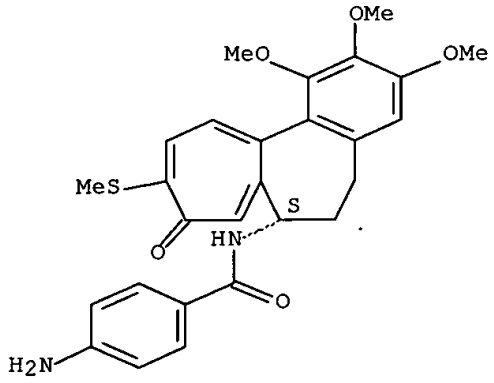
Absolute stereochemistry.



RN 107277-91-8 CAPLUS

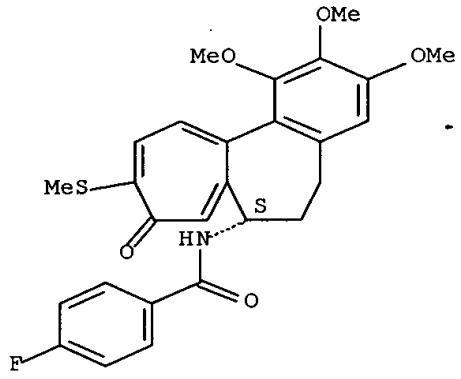
CN Benzamide, 4-amino-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-
9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



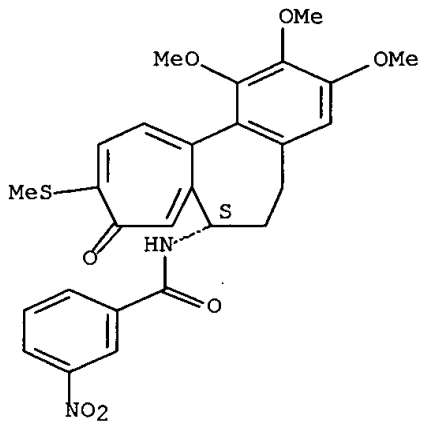
RN 147950-67-2 CAPLUS
CN Benzamide, 4-fluoro-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-
9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



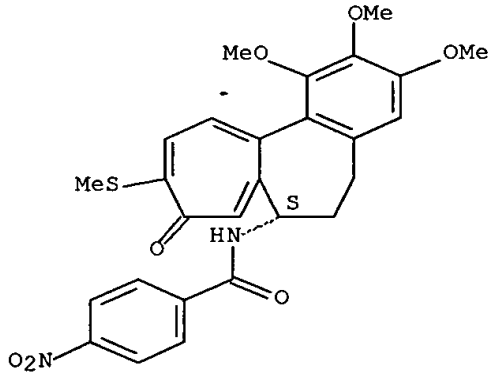
RN 147950-71-8 CAPLUS
CN Benzamide, 3-nitro-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-
9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



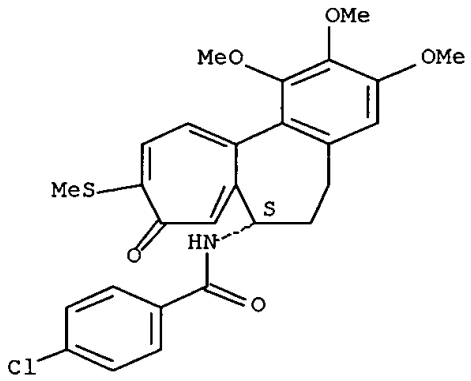
RN 147950-72-9 CAPLUS
CN Benzamide, 4-nitro-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



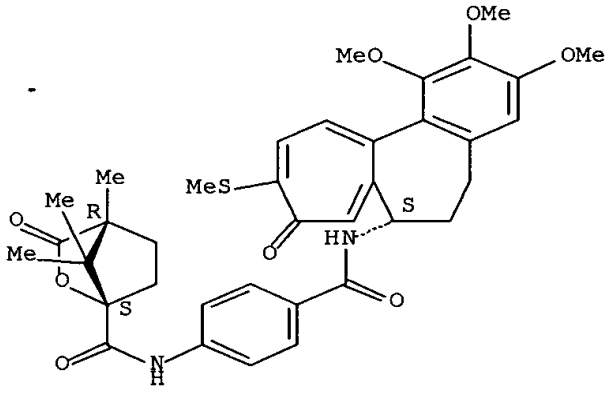
RN 147950-73-0 CAPLUS
CN Benzamide, 4-chloro-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



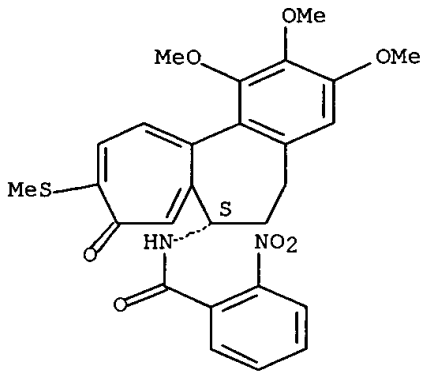
RN 205804-94-0 CAPLUS
CN 2-Oxabicyclo[2.2.1]heptane-1-carboxamide, 4,7,7-trimethyl-3-oxo-N-[4-[[[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]amino]carbonyl]phenyl]-, [1S-[1.alpha.(R*),4.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



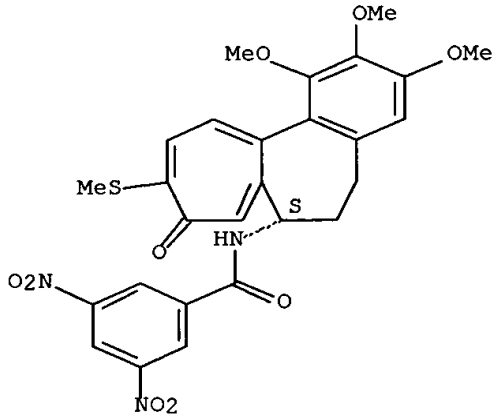
RN 205804-98-4 CAPLUS
CN Benzamide, 2-nitro-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



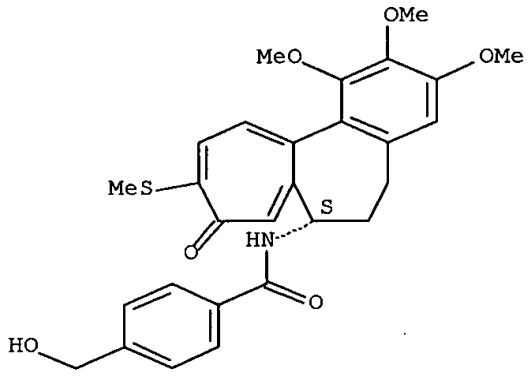
RN 205805-00-1 CAPLUS
CN Benzamide, 3,5-dinitro-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 205805-07-8 CAPLUS
CN Benzamide, 4-(hydroxymethyl)-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



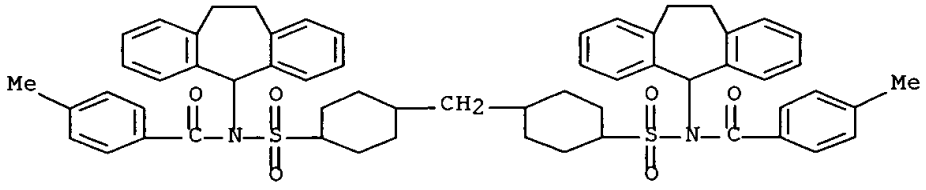
L10 ANSWER 9 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1998:21505 CAPLUS
DN 128:121756
TI Positive image-forming composition
IN Kawamura, Koichi; Uenishi, Kazuya
PA Fuji Photo Film Co., Ltd., Japan
SO Eur. Pat. Appl., 49 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 814381	A1	19971229	EP 1997-110034	19970619
	EP 814381	B1	20010919		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 10010735	A2	19980116	JP 1996-160276	19960620
	JP 10039514	A2	19980213	JP 1996-190939	19960719
PRAI	JP 1996-160276	A	19960620		
	JP 1996-190939	A	19960719		

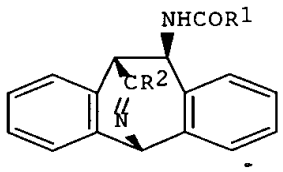
AB A pos. image-forming compn. comprises (a) a compd. generating an acid by the action of light or heat and (b) at least one compd. selected from the N-sulfonylamide compds. represented by the formula L1(SO2NR2COR1)n or L1(CONR2SO2R1)n wherein n is an integer of from 1 to 6, R1 represents an arom. group or an alkyl group, L1 represents an arom. group or an alkyl group when n is 1 or L1 represents a polyvalent linkage group constituted of nonmetal atoms when n is from 2 to 6, and R2 represents a tertiary alkyl group, an alkoxymethyl group, an arylmethyl group, or an alicyclic alkyl group or (c) a polymer having constitutional units represented by the formula -SO2NR3CO- wherein R3 represents a tertiary alkyl group, an alkoxymethyl group, an arylmethyl group, or an alicyclic alkyl group.

IT **201656-54-4**
RL: TEM (Technical or engineered material use); USES (Uses)
(pos. photoresists contg.)

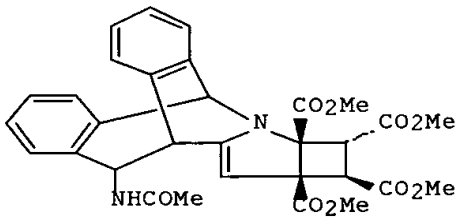
RN 201656-54-4 CAPLUS
CN Benzamide, N,N'-[methylenebis(4,1-cyclohexanediylsulfonyl)]bis[N-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-yl)-4-methyl- (9CI) (CA INDEX NAME)



L10 ANSWER 10 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1996:504780 CAPLUS
DN 125:275703
TI Ritter reactions. Part 11. The diverse reactivity of 5,10-(azenometheno)-
5H-dibenzo[a,d]cyclohepten-11-yl amides with dimethyl acetylenedicarboxylate
AU Djaidi, Djamal; Bishop, Roger; Craig, Donald C.; Scudder, Marcia L.
CS School Chem., Univ. New South Wales, Sydney, 2052, Australia
SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1996), (15), 1859-1866
CODEN: JCPRB4; ISSN: 0300-922X
PB Royal Society of Chemistry
DT Journal
LA English
GI



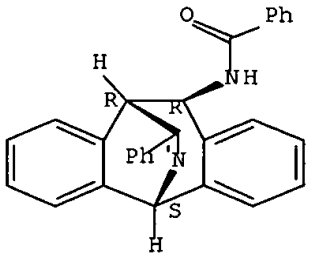
I



II

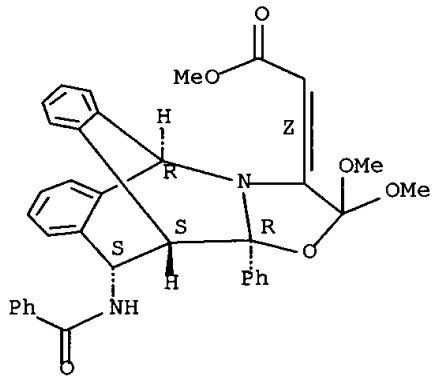
AB Each of the 5,10-(azenometheno)-5H-dibenzo[a,d]cyclohepten-11-yl amide derivs. I (R1 = Me, Ph, CH2Ph; R2 = Me, Ph, COPh) reacts with di-Me acetylenedicarboxylate (DMAD) through its imine group to yield novel and unexpected heterocyclic products, e.g., II. Tetraester II was isolated as
its inclusion compd. II.(C6H6)0.5 and the host-guest interactions involved
therein are analyzed in crystal engineering terms.
IT **182201-10-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(Ritter reaction of (azenometheno)dibenzocycloheptenyl amides with acetylenedicarboxylate)
RN 182201-10-1 CAPLUS
CN Benzamide, N-(10,11-dihydro-12-phenyl-5,10-(nitrilometheno)-5H-dibenzo[a,d]cyclohepten-11-yl)-, (5.alpha.,10.alpha.,11.alpha.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT **182201-15-6P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(crystal structure; Ritter reaction of (azenometheno)dibenzocyclohepten
yl amides with acetylenedicarboxylate)
RN 182201-15-6 CAPLUS
CN Acetic acid, [10-(benzoylamino)-5,10,11,11a-tetrahydro-2,2-dimethoxy-11a-
phenyl-5,11[1',2']benzenooxazolo[3,2-b][2]benzazepin-3(2H)-ylidene]-,
methyl ester, (3Z,5.alpha.,10.beta.,11.alpha.,11a.beta.)- (9CI) (CA INDEX
NAME)

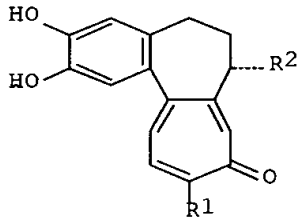
Relative stereochemistry.
Double bond geometry as shown.



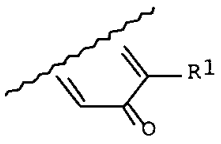
L10 ANSWER 11 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1995:219148 CAPLUS
DN 122:133498
TI Preparation of N-acyldemethylcolchicine derivatives as mammalian DNA topoisomerase II inhibitors
IN Lee, Kuo-Hsiung; Bastow, Kenneth F.
PA University of North Carolina, USA
SO PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9421598	A1	19940929	WO 1994-US2935	19940318
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5426224	A	19950620	US 1993-32867	19930318
US 5639793	A	19970617	US 1995-471749	19950605
PRAI US 1993-32867		19930318		

OS MARPAT 122:133498
GI



I

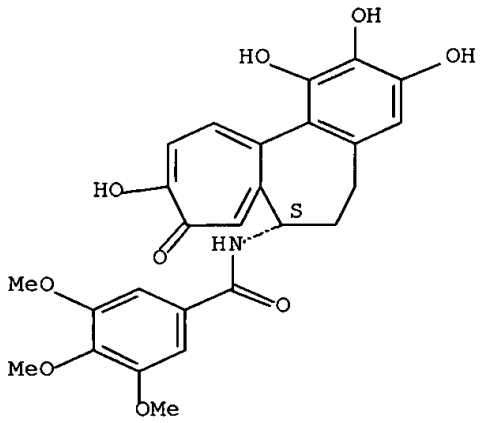


II

AB Title compds. I and II (R1 = R1'O, R1'S, or R1'R1''N, wherein R1', R1'' = H, alkyl; R2 = aroylamino) are prepd. I and II are also useful for inhibiting cell proliferation in drug-resistant tumor cells. Colchicine was converted in 3 steps to I (R1 = HO, R2 = F3CCONH). Mammalian DNA topoisomerase inhibition and inhibition of proliferation in drug-resistant tumor cells was demonstrated.

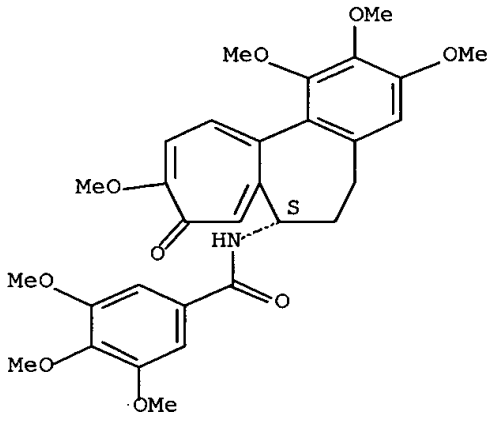
IT **159334-57-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of N-acyldemethylcolchicine derivs. as mammalian DNA topoisomerase II inhibitors)
RN 159334-57-3 CAPLUS
CN Benzamide, 3,4,5-trimethoxy-N-(5,6,7,9-tetrahydro-1,2,3,10-tetrahydroxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **86436-39-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. of N-acyldemethylcolchicine derivs. as mammalian DNA topoisomerase II inhibitors)
RN 86436-39-7 CAPLUS
CN Benzamide, 3,4,5-trimethoxy-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-
oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

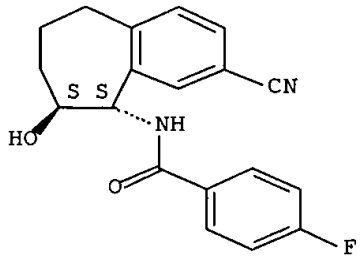


L10 ANSWER 12 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1994:549100 CAPLUS
DN 121:149100
TI Potassium channel activators for use in therapy for brain disorders and effects associated with withdrawal from abused substances
IN Vong, Kuok Keong; Evans, John Morris; Nadler, Guy Marguerite Marie Gerard; Willette, Robert Nicholas
PA SmithKline Beecham PLC, UK; SmithKline Beecham Corporation
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

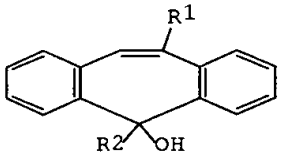
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9413292	A1	19940623	WO 1993-GB2514	19931208
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 673248	A1	19950927	EP 1994-902046	19931208
	R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
	JP 08504432	T2	19960514	JP 1993-513936	19931208
PRAI	GB 1992-25860		19921211		
	WO 1993-GB2514		19931208		

OS MARPAT 121:149100
AB A method of treatment and/or prophylaxis of anxiety, mania, depression, the effects assocd. with withdrawal from substances of abuse such as cocaine, nicotine, alc. and benzodiazepines; disorders treatable and/or preventable with anticonvulsive agents, such as epilepsy; and in the treatment or prevention of cerebral ischemia, disorders resulting from sub-arachnoid hemorrhage, Parkinson's disease, migraine, and/or psychosis, comprises administering to the sufferer in need thereof an effective or propylactic amt. of a potassium channel activator (Markush included). Trans-3-cyano-5-(4-fluorobenzamido)-6,7,8,9-tetrahydro-5H-benzocycloheptan-6-ol and trans-7-cyano-5-(4-fluorobenzamino)-4-hydroxy-2,2-dimethyl-2,3,4,5-tetrahydro-1-benzoxepine are specifically claimed. Prepn. of selected compds. of the invention are included. Trans-7-(4-fluorobenzamido)-5,6-dihydro-6-hydroxy-2-nitro-5,5-dimethyl-7H-thieno[3,2-b]pyran enhanced the threshold of shock by 95% at 30 mg/kg p.o. in a rodent maximal electroshock seizure threshold test.
IT **157403-54-8**
RL: BIOL (Biological study)
(for treatment of brain disorders and effects assocd. with withdrawal from abused substances)
RN 157403-54-8 CAPLUS
CN Benzamide, N-(3-cyano-6,7,8,9-tetrahydro-6-hydroxy-5H-benzocyclohepten-5-yl)-4-fluoro-, trans- (9CI) (CA INDEX NAME)

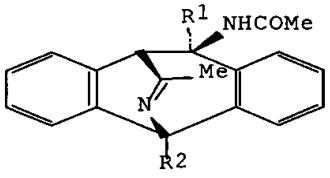
Relative stereochemistry.


S S
CN
NH
HO
O
F

L10 ANSWER 13 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1994:457321 CAPLUS
DN 121:57321
TI Ritter reactions. IX. Transannular addition of nitriles to the 5H-dibenzo[a,d]cycloheptene ring system
AU Pich, Kim C.; Bishop, Roger; Craig, Donald C.; Scudder, Marcia L.
CS Sch. Chem., Univ. New South Wales, Kensington, 2033, Australia
SO Australian Journal of Chemistry (1994), 47(5), 837-51
CODEN: AJCHAS; ISSN: 0004-9425
DT Journal
LA English
GI



I



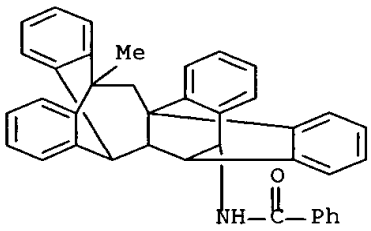
II

AB The 5H-dibenzo[a,d]cyclohepten-5-ols I (R1 = H, Me; R2 = H, Me, Ph) undergo sequential intramol. and conventional Ritter reactions with MeCN to give [5,10-(nitrilomethano)-5H-dibenzo[a,d]cyclohepten-11-yl]acetamides II (same R1, R2). Typical yields for these 1-flask conversions are 52-64%. The mol. skeleton present in II was confirmed by crystal structure detn.

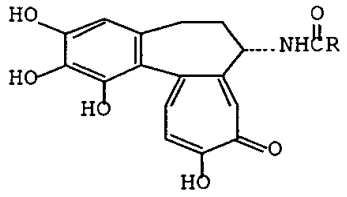
IT **156094-53-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 156094-53-0 CAPLUS

CN Benzamide, N-(5,6,6a,7,12,13-hexahydro-12-methyl-6,13a[1',2']:7,12[1'',2'']-dibenzeno-13aH-benzo[4,5]cyclohepta[1,2-a]naphthalen-5-yl)-, (5.alpha.,6.beta.,6a.alpha.,13a.beta.)- (9CI) (CA INDEX NAME)



L10 ANSWER 14 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1994:107412 CAPLUS
DN 120:107412
TI Antitumor agents. 140. Induction of reversible protein-linked DNA breaks in human osteogenic sarcoma cells by novel cytocidal colchicine derivatives which inhibit DNA topoisomerase II in vitro: absence of cross-resistance in a colchicine-resistant sub-clone
AU Bastow, Kenneth F.; Tatematsu, Hiroshi; Bori, Ibrahim D.; Fukushima, Yasuhiro; Sun, Li; Goz, Barry; Lee, Kuo Hsiung
CS Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27599, USA
SO Bioorganic & Medicinal Chemistry Letters (1993), 3(6), 1045-50
CODEN: BMCLE8; ISSN: 0960-894X
DT Journal
LA English
GI



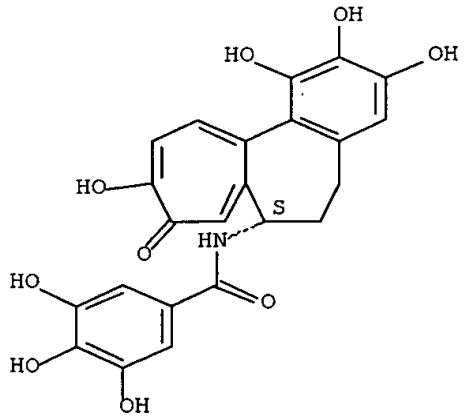
I

AB Two colchicine derivs. I [R = CF3, 3,4,5-(HO)3C6H2] were prepd. from colchicine. I gave dose-dependent cytocidal effects in human osteogenic sarcoma cells. Unlike colchicine, the analogs stimulated formation of intracellular protein-linked DNA breaks, they inhibited DNA topoisomerase II in vitro, and their cytotoxic action was not modulated by the P-glycoprotein drug-efflux pump.

IT **152530-27-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cytotoxic activity of)

RN 152530-27-3 CAPLUS
CN Benzamide, 3,4,5-trihydroxy-N-(5,6,7,9-tetrahydro-1,2,3,10-tetrahydroxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

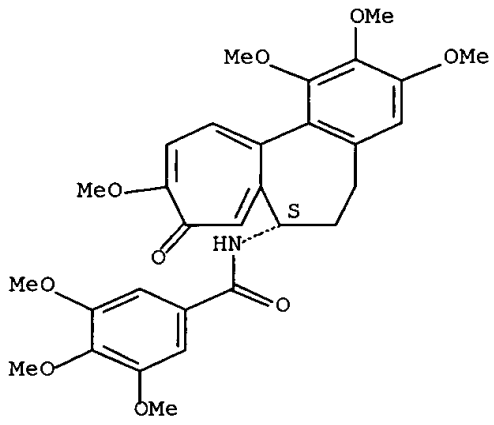
Absolute stereochemistry.



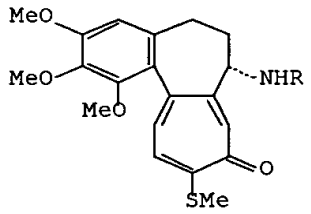
IT **86436-39-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)(prepn. and demethylation of)

RN 86436-39-7 CAPLUS
CN Benzamide, 3,4,5-trimethoxy-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 15 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1993:409007 CAPLUS
DN 119:9007
TI Antitumor agents. 141. Synthesis and biological evaluation of novel thiocolchicine analogs: N-acyl, N-aroyl-, and N-(substituted benzyl)deacetylthiocolchicines as potent cytotoxic and antimitotic compounds
AU Sun, Li; Hamel, Ernest; Lin, Chii M.; Hastie, Susan B.; Pyluck, Amy; Lee, Kuo Hsiung
CS Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27599, USA
SO Journal of Medicinal Chemistry (1993), 36(10), 1474-9
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
GI



I

AB Three series of novel thiocolchicine analogs, N-acyl-, N-aroyl-, and N-(substituted benzyl)-deacetylthiocolchicinoids I (R = 4-O2NC6H4CH2, 4-FC6H4CO, 4-FC6H4CO, nonyl, etc.), were synthesized and evaluated for their cytotoxicity against various tumor cell lines, esp. solid tumor cell lines, and for their inhibitory effects on tubulin polymn. in vitro. Most of these compds. showed strong inhibitory effects on tubulin polymn. comparable to that obtained with thiocolchicine and greater than that obtained with colchicine. Only compds. with a long side chain at the C(7) position, such as I (R = nonyl), did not inhibit tubulin polymn. Several of the active N-aroyldeacetylthiocolchicine analogs had pos. optical rotations, in contrast to the neg. optical rotation obsd. with most colchicinoids. This property might be attributed to a reversal of biaryl configuration from the normal aS to aR. Therefore, the N-aroyl analogs were further evaluated by CD, which readily distinguishes between the aS and aR biaryl configurations. This latter technique demonstrated that the active N-aroyl analogs do have an aS configuration despite their pos. optical rotations. However, comparison of 1H NMR and UV spectral data of N-(substituted benzyl)-deacetylthiocolchicines with those of corresponding N-aroyldeacetylthiocolchicines suggested a different biaryl dihedral angle [even though these compds. have the same aS biaryl configuration]. The similar tubulin binding properties of these compds. suggest that a biaryl dihedral angle of 53.degree. is not essential for colchicinoid-tubulin interaction. The increased cytotoxicity of N-(substituted benzyl)deacetylthiocolchicines compared to the N-aroyldeacetylthiocolchicines may be attributed to different lipophilicity, drug uptake, or drug metab. in the tumor cells. The side chain at the C(7) position affects inhibition of tubulin polymn. and the cytotoxic activity of colchicinoids as a function of its size and its contribution to lipophilicity.

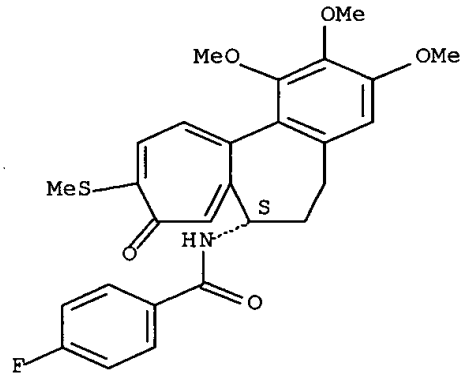
IT **147950-67-2P 147950-68-3P 147950-71-8P**
147950-72-9P
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and cytotoxicity and inhibition of tubulin polymn. by)

RN 147950-67-2 CAPLUS

CN Benzamide, 4-fluoro-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-
9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

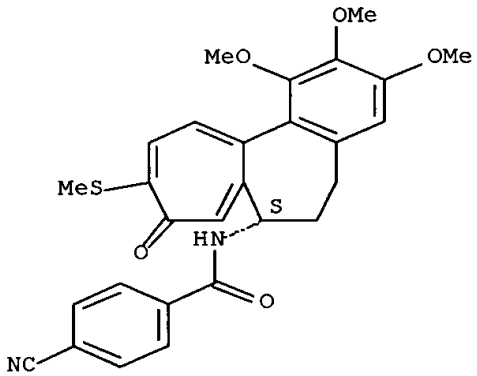
Absolute stereochemistry.



RN 147950-68-3 CAPLUS

CN Benzamide, 4-cyano-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

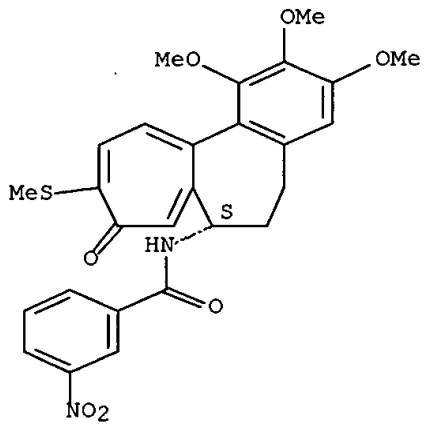
Absolute stereochemistry.



RN 147950-71-8 CAPLUS

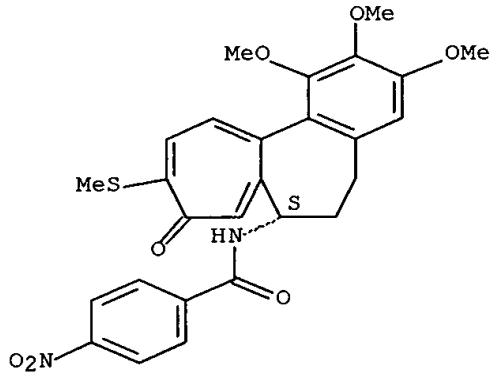
CN Benzamide, 3-nitro-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-
9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



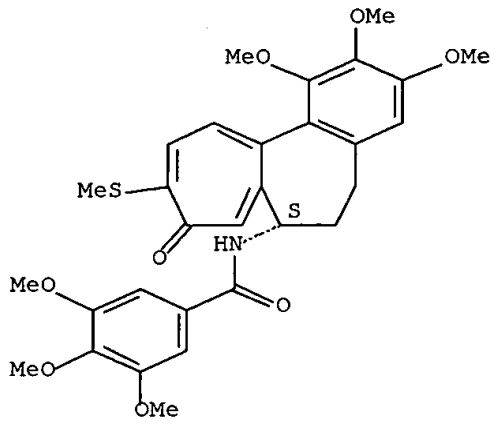
RN 147950-72-9 CAPLUS
CN Benzamide, 4-nitro-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



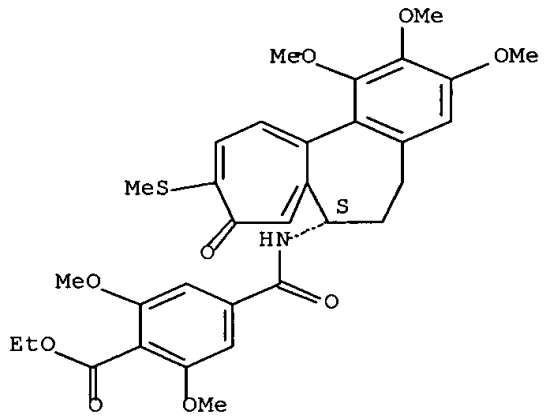
IT **103591-54-4P 147950-69-4P 147950-70-7P**
147950-73-0P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and cytotoxicity of)
RN 103591-54-4 CAPLUS
CN Benzamide, 3,4,5-trimethoxy-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



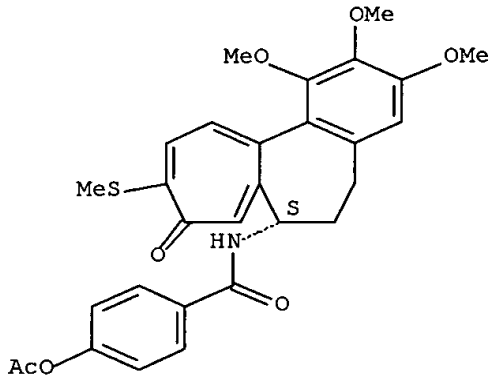
RN 147950-69-4 CAPLUS
CN Benzoic acid, 2,6-dimethoxy-4-[[[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]amino]carbonyl]-, ethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



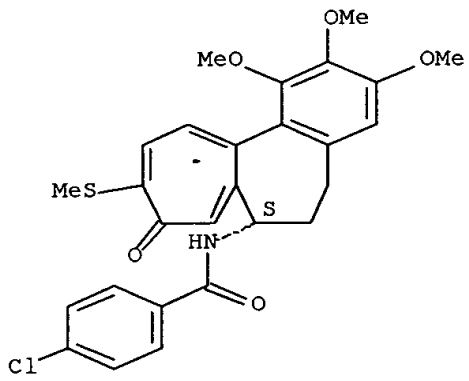
RN 147950-70-7 CAPLUS
CN Benzamide, 4-(acetyloxy)-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

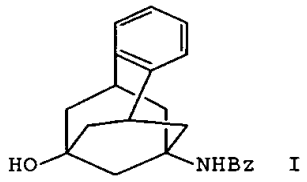


RN 147950-73-0 CAPLUS
CN Benzamide, 4-chloro-N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

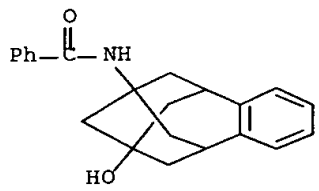


L10 ANSWER 16 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1991:558571 CAPLUS
DN 115:158571
TI Ritter reactions. VI. Crystal structure of a new multicyclic hydroxy amide clathrate
AU Bishop, Roger; Burgess, Graham; Craig, Donald C.; Dance, Ian G.; Lipari, Tony; Scudder, Marcia L.
CS Sch. Chem., Univ. New South Wales, Kensington, 2033, Australia
SO Journal of Inclusion Phenomena and Molecular Recognition in Chemistry (1991), 10(4), 431-42
CODEN: JIMCEN; ISSN: 0923-0750
DT Journal
LA English
OS CASREACT 115:158571
GI



I

AB 9-Benzamido-6,7,8,9,10,11-hexahydro-5,9:7,11-dimethano-5H-benzocyclononen-
7-ol (I) has been prepd. I crystallizes as its inclusion complexes (I)2.G
(G = AcOEt, CCl4). The crystal structure of (I)2.CCl4 contains the host mols. H-bonded in layers, with the CCl4 mols. trapped between the layers.
Two types of host-host H bonds, OH to amide carbonyl O, and amide NH to hydroxyl O, maintain the host layers. The benzo groups protrude normal to
these host layers, and six such groups provide the closest surroundings of
the CCl4, which is constrained to two disordered orientations of the one location. This is a layer clathrate structure.
IT **128102-28-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and complexation of, with Et acetate or carbon tetrachloride)
RN 128102-28-3 CAPLUS
CN Benzamide, N-(5,6,8,9,10,11-hexahydro-9-hydroxy-5,9:7,11-dimethano-7H-benzocyclononen-7-yl)- (9CI) (CA INDEX NAME)

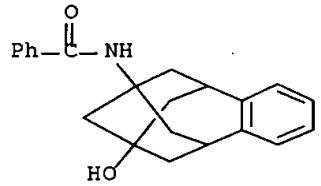


IT **136337-28-5P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and crystal structure of)

RN 136337-28-5 CAPLUS
CN Benzamide, N-(5,6,8,9,10,11-hexahydro-9-hydroxy-5,9:7,11-dimethano-7H-benzocyclononen-7-yl)-, compd. with tetrachloromethane (2:1) (9CI) (CA INDEX NAME)

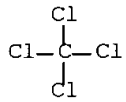
CM 1

CRN 128102-28-3
CMF C22 H23 N O2



CM 2

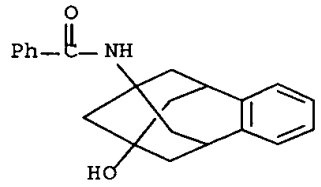
CRN 56-23-5
CMF C Cl4



IT **136337-27-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 136337-27-4 CAPLUS
CN Acetic acid ethyl ester, compd. with N-(5,6,8,9,10,11-hexahydro-9-hydroxy-5,9:7,11-dimethano-7H-benzocyclononen-7-yl)benzamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 128102-28-3
CMF C22 H23 N O2

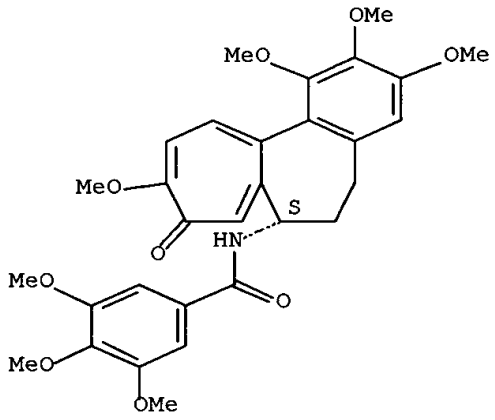


CM 2

CRN 141-78-6
CMF C4 H8 O2

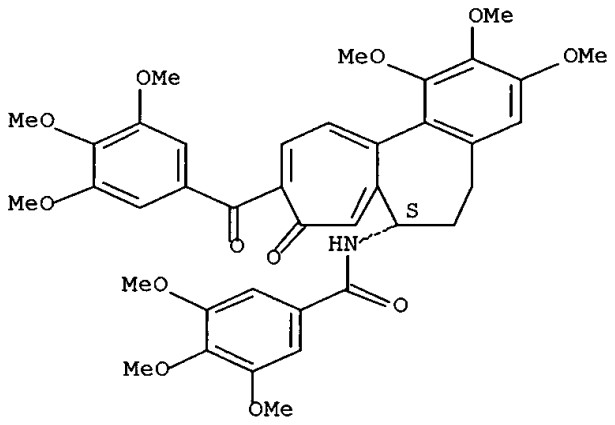
L10 ANSWER 17 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1991:425884 CAPLUS
DN 115:25884
TI Anti-AIDS agents. 3. Inhibitory effects of colchicine derivatives on HIV
replication in H9 lymphocyte cells
AU Tatematsu, Hiroshi; Kilkuskie, Robert E.; Corrigan, Alice J.; Bodner, Anne
J.; Lee, Kuo Hsiung
CS Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27599, USA
SO Journal of Natural Products (1991), 54(2), 632-7
CODEN: JNPRDF; ISSN: 0163-3864
DT Journal
LA English
AB A series of colchicine and isocolchicine derivs. were evaluated as inhibitors of HIV replication in H9 lymphocytes. Colchicine showed only very slight inhibition in the absence of toxicity. None of the derivs. inhibited HIV replication in the absence of toxicity.
IT **86436-39-7 134568-32-4**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); BIOL (Biological study)
(HIV virus response to)
RN 86436-39-7 CAPLUS
CN Benzamide, 3,4,5-trimethoxy-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-
oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

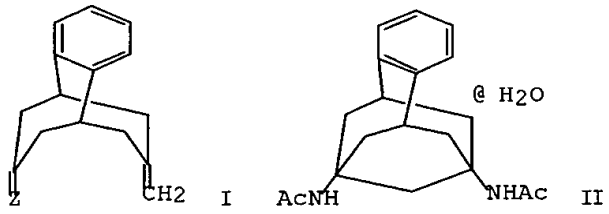


RN 134568-32-4 CAPLUS
CN Benzamide, 3,4,5-trimethoxy-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-9-oxo-
10-(3,4,5-trimethoxybenzoyl)benzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.

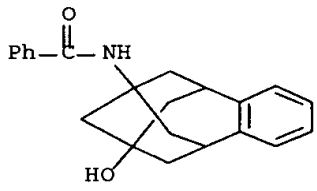

OMe
MeO
OMe
OMe
MeO
MeO
S
HN
O
O
O
MeO
MeO
OMe

L10 ANSWER 18 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1990:439994 CAPLUS
DN 113:39994
TI Ritter reactions. I. Combined intramolecular cyclization and amide formation
AU Amini; Bishop, Roger; Burgess, Graham; Craig, Donald C.; Dance, Ian G.; Scudder, Marcia L.
CS Sch. Chem., Univ. New South Wales, Kensington, 2033, Australia
SO Australian Journal of Chemistry (1989), 42(11), 1919-28
CODEN: AJCHAS; ISSN: 0004-9425
DT Journal
LA English
OS CASREACT 113:39994
GI



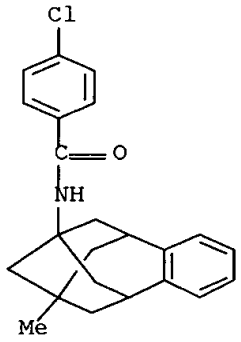
AB 1,5-Dimethylenecyclooctane and dimethylenebenzobicyclodecene I (Z = CH2) undergo efficient intramol. cyclization and Ritter reaction in a 1-pot procedure. Similarly, I (Z = O) is converted into cyclic hydroxy amide products. Alternatively, a combined intramol. cyclization and double Ritter reaction of I (Z = O) with MeCN produces diacetamidobenzotricycloundecene monohydrate II, whose crystal structure was detd.

IT **128102-28-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and Ritter reaction of, with acetonitrile or benzonitrile)
RN 128102-28-3 CAPLUS
CN Benzamide, N-(5,6,8,9,10,11-hexahydro-9-hydroxy-5,9:7,11-dimethano-7H-benzocyclononen-7-yl)- (9CI) (CA INDEX NAME)

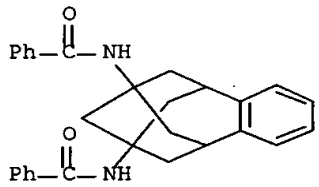


IT **128102-24-9P 128102-27-2P 128102-29-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 128102-24-9 CAPLUS
CN Benzamide, 4-chloro-N-(5,6,8,9,10,11-hexahydro-9-methyl-5,9:7,11-

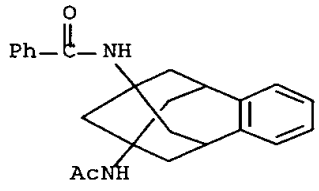
dimethano-
7H-benzocyclononen-7-yl)- (9CI) (CA INDEX NAME)



RN 128102-27-2 CAPLUS
CN Benzamide, N,N'-(10,11-dihydro-5,9:7,11-dimethano-5H-benzocyclononene-7,9(6H,8H)-diyl)bis- (9CI) (CA INDEX NAME)

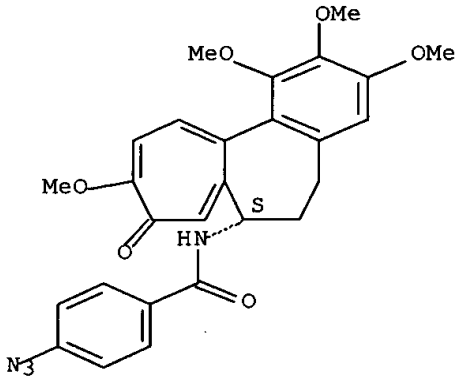


RN 128102-29-4 CAPLUS
CN Benzamide, N-[9-(acetylamino)-5,6,8,9,10,11-hexahydro-5,9:7,11-dimethano-
7H-benzocyclononen-7-yl]- (9CI) (CA INDEX NAME)



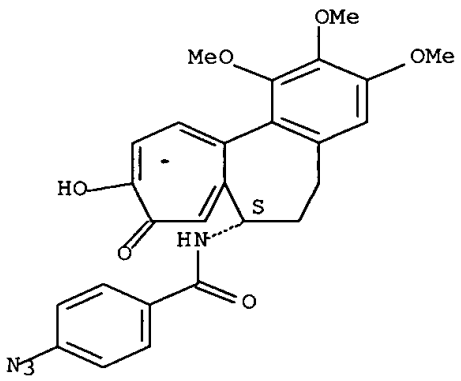
L10 ANSWER 19 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1990:114575 CAPLUS
DN 112:114575
TI Large-scale purification of bovine brain lactate dehydrogenase by affinity
chromatography on immobilized colchicine
AU Kocha, Tomoji; Fukuda, Teruo; Isobe, Toshiaki; Okuyama, Tsuneo
CS Dep. Hyg. Chem., Showa Coll. Pharm. Sci., Tokyo, 154, Japan
SO Journal of Biochemistry (Tokyo, Japan) (1990), 107(1), 138-43
CODEN: JOBIAO; ISSN: 0021-924X
DT Journal
LA English
AB Lactate dehydrogenase (LDH) (EC 1.1.1.27) in a crude ext. (40-80% (NH4)2SO4 fraction) of bovine brain was adsorbed on an immobilized colchicine column and specifically eluted by addn. of 1 mM NADH. The purity and subunit compn. of the pooled LDH were estd. by 2-dimensional gel electrophoresis. With an increase of NaCl concn. from 0 to 2.0M, ligand satn. of LDH on immobilized colchicine increased from 6.8 to 14%, whereas that on immobilized Cibacron Blue F3GA decreased from 2.1 to 0%. In the presence of high NaCl concn., immobilized colchicine enabled both large- and small-scale purifn. of LDH by affinity chromatog. and resulted in a yield of 117 mg from 1 kg of bovine brain in the presence of 2.5M NaCl or higher recoveries of 54-96% from various tissues of one rat in the presence of 1.0M NaCl. These results indicated that immobilized colchicine is an excellent adsorbent for the isolation and purifn. of LDH by affinity chromatog. and has a high LDH-adsorbing capacity dependent upon a high NaCl concn. Kinetic studies revealed that colchicine apparently competed with NAD for the active site of LDH and the Ki values of colchicine decreased with an increase in NaCl concn. The chem. specificity of the colchicine-binding site of LDH was studied by the use of colchicine analogs and it was concluded that both the tropolone moiety (C-ring) and the amido bond in a side-chain of colchicine structure are essential to the colchicine-LDH interaction.
IT **125676-86-0 125676-87-1**
RL: BIOL (Biological study)
(lactate dehydrogenase of brain inhibition by, kinetics of, structure in relation to)
RN 125676-86-0 CAPLUS
CN Benzamide, 4-azido-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 125676-87-1 CAPLUS
CN Benzamide, 4-azido-N-(5,6,7,9-tetrahydro-10-hydroxy-1,2,3-trimethoxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

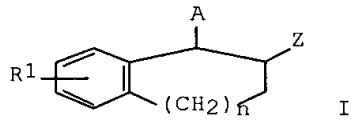
Absolute stereochemistry.



L10 ANSWER 20 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1990:98372 CAPLUS
DN 112:98372
TI Pyrrolidinylbenzocyclohexanes and -benzocyclopentanes as analgesics and diuretics, formulations containing them, and their preparation
IN Clemence, Francois; Fortin, Michel; Frechet, Daniel; Moura, Anne Marie
PA Roussel-UCLAF, Fr.
SO Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 329563	A2	19890823	EP 1989-400450	19890217
	EP 329563	A3	19900328		
	EP 329563	B1	19930421		
	R: CH, DE, FR, GB, IT, LI, NL				
	FR 2627491	A1	19890825	FR 1988-1928	19880218
	FR 2627491	B1	19920124		
	JP 02003644	A2	19900109	JP 1989-35186	19890216
	US 5068244	A	19911126	US 1989-312885	19890217
	US 5130329	A	19920714	US 1990-591283	19901001
PRAI	FR 1988-1928		19880218		
	US 1989-312885		19890217		

OS CASREACT 112:98372; MARPAT 112:98372
GI



I

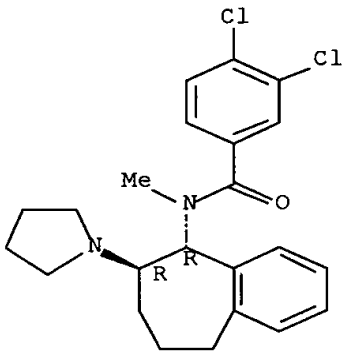
AB The title compds. I [R1 = H, halo, alkyl, alkoxy, etc.; n = 1 or 2; A and Z are in trans configuration; 1 of A , Z = R2NCOZ1Y and the other = NR4R5; R4, R5 = H, alkyl, or NR4R5 = heterocyclyl; R2 = H, alkyl; Z1 = (CH2)m, etc.; m = 0-5; Y = (substituted) Ph, naphthyl, etc.], useful as diuretics and analgesics with affinity for kappa receptors, were prepd. Condensation of trans-(.+-.)-N-methyl-2-(1-pyrrolidinyl)-1,2,3,4-tetrahydro-1-naphthaleneamine with 3,4-dimethoxyphenylacetic acid in the presence of carbonyldiimidazole, followed by workup and treatment with fumaric acid, gave (.+-.)-trans-3,4-dimethoxy-N-methyl-N-[2-(1-pyrrolidinyl)-1,2,3,4-tetrahydro-1-naphthyl]benzeneacetamide fumarate. In an in vitro test for opiate .kappa. receptor binding using 3H-ethylketocyclazocine and U-50488 H, trans-(.+-.)-N-methyl-4-nitro-N-[2-(1-pyrrolidinyl)-1,2,3,4-tetrahydro-1-naphthyl]benzeneacetamide had an IC50 of 12 nM.
IT **125444-83-9P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as analgesic and diuretic)

RN 125444-83-9 CAPLUS

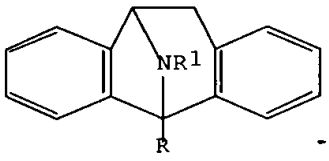
CN Benzamide, 3,4-dichloro-N-methyl-N-[6,7,8,9-tetrahydro-6-(1-pyrrolidinyl)-5H-benzocyclohepten-5-yl]-, monohydrochloride, trans- (9CI) (CA INDEX NAME)

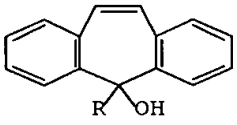
Relative stereochemistry.

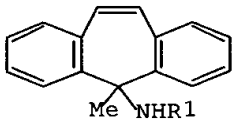


● HCl

L10 ANSWER 21 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1988:186539 CAPLUS
DN 108:186539
TI .alpha.-Effect nucleophiles: a novel and convenient method for the synthesis of dibenzo[a,d]cycloheptenimines
AU Lamanec, Theresa Rothauser; Bender, Dean R.; DeMarco, Anthony M.; Karady, Sandor; Reamer, Robert A.; Weinstock, Leonard M.
CS Merck Sharp Dohme Res. Lab. Div., Merck and Co., Inc., Rahway, NJ, 07065, USA
SO Journal of Organic Chemistry (1988), 53(8), 1768-74
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
OS CASREACT 108:186539
GI



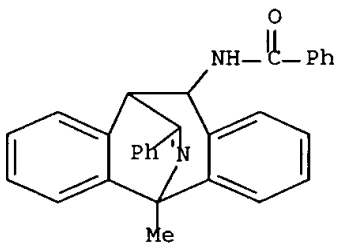
I


II


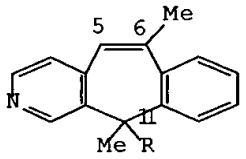
III

AB As anticonvulsant and neuroprotective agents (no data), the title compds. I (R = H, Me, R1 = H) were prepd. from carbinols II. Thus, addn. of .alpha.-effect amine equiv., e.g. NH2OH, MeONH2, NH2NH2 and BzNHNH2, to II (R = Me) gave 82-100% amine derivs. III (R1 = OH, OMe, NH2, NHBz). Under moderately acidic conditions, III were obtained without competing elimination or dimerization. Ring closure of III with Me3COK in DMSO-PhMe gave 65-95% of I (R = Me, R1 = OH, OMe, NH2, NHBz) (IV). An increasing reactivity order paralleling an increase in nucleophilicity was obsd. for this ring closure. The 13C NMR spectra of IV showed an equil. between syn- and anti-conformers via inversion at the N bridge. Hydrogenolysis of I (R = Me, R1 = OH, NH2, OMe) gave 64-90% I (R = Me, R1 = H).
IT **113628-13-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 113628-13-0 CAPLUS
CN Benzamide, N-(10,11-dihydro-5-methyl-12-phenyl-5,10-(nitrilometheno)-5H-

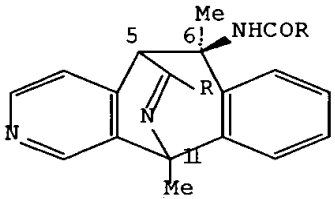
dibenzo[a,d]cyclohepten-11-yl)-, (5.alpha.,10.alpha.,11.alpha.)- (9CI) (CA INDEX NAME)



L10 ANSWER 22 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1987:138289 CAPLUS
DN 106:138289
TI Imino-bridged heterocycles. VI. An unusual bridge structure resulting from an attempted Ritter reaction in the benzo[5,6]cyclohepta[1,2-c]pyridine system
AU Reamer, Robert A.; Brenner, Daniel G.; Shepard, Kenneth L.
CS Merck Sharp and Dohme Res. Lab., Rahway, NJ, 07065, USA
SO Journal of Heterocyclic Chemistry (1986), 23(3), 961-2
CODEN: JHTCAD; ISSN: 0022-152X
DT Journal
LA English
OS CASREACT 106:138289
GI



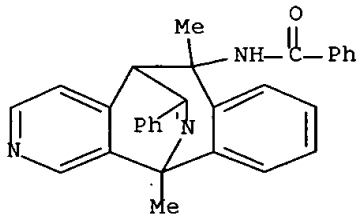
I



II

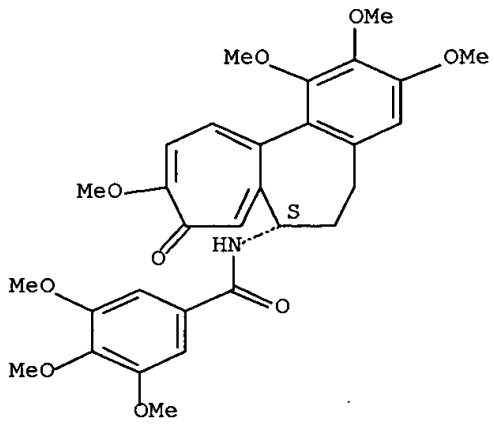
AB An attempt to generate a tertiary carbinamine I (R = NHAc) from benzocycloheptapyridinol I (R = OH) through the Ritter reaction, gave the new bridged system II (R = Me, Ph). This product apparently resulted from an intramol. cyclization of the 5,6-double bond with the C-11 nitrilium ion, followed by a second Ritter reaction at C-6.

IT **107468-78-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 107468-78-0 CAPLUS
CN Benzamide, N-(6,11-dihydro-6,11-dimethyl-13-phenyl-11,5-(nitrilometheno)-5H-benzo[5,6]cyclohepta[1,2-c]pyridin-6-yl)-, (5.alpha.,6.alpha.,11.alpha.)- (9CI) (CA INDEX NAME)



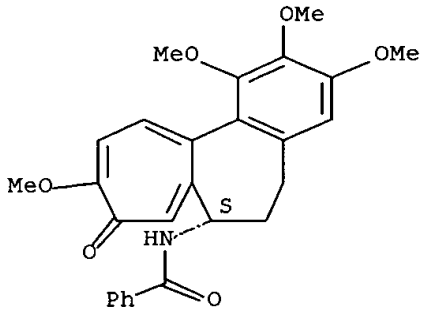
L10 ANSWER 23 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1987:78257 CAPLUS
DN 106:78257
TI Separation of tubulin-binding and anti-inflammatory activity in colchicine analogs and congeners
AU Sugio, Kazuo; Maruyama, Masami; Tsurufuji, Susumu; Sharma, Padam N.; Brossi, Arnold
CS Fac. Pharm. Sci., Tohoku Univ., Sendai, 980, Japan
SO Life Sciences (1987), 40(1), 35-9
CODEN: LIFSAK; ISSN: 0024-3205
DT Journal
LA English
AB The effects of colchicine [64-86-8] and its analogs on the carrageenin-induced footpad edema in rats were investigated. The anti-inflammatory effects of colchicine analogs were measured at 3 and 5 h after the carrageenin injection. Colchicine, 1-demethylcolchicine [3464-68-4] and 3-demethylcolchicine [7336-33-6] markedly inhibited the carrageenin edema whereas 2-demethylcolchicine [7336-36-9] was much less active. Thiocolchicinoids, having a thiomethyl group at C-10 instead of a methoxy group, were considerably less potent. These results suggest that the presence of methoxy groups at C-2 and C-10 in colchicine is necessary to maintain anti-inflammatory activity. Inactivity of N-deacetylcolchicine [3476-50-4] indicates that substitution of the amino group at C-7 with electron withdrawing groups is also important. Significant inhibition of carrageenin edema and strong binding to tubulin in vitro were manifested by colchicine, 3-demethylcolchicine, N-butyryldeacetylcolchicine [477-29-2] and colchifoline [74515-40-5]. On the other hand, N-carbethoxydeacetylcolchicine [86436-42-2], which did bind well to tubulin, did not show much effect on the carrageenin edema. These results suggest that the anti-inflammatory action of colchicinoids may not be regulated through the microtubule system.
IT **86436-39-7**, N-3,4,5 Trimethoxybenzoyldeacetylcolchicine
RL: BIOL (Biological study)
(inflammation-inhibition activity of, structure and tubulin binding in relation to)
RN 86436-39-7 CAPLUS
CN Benzamide, 3,4,5-trimethoxy-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.


OMe
MeO
OMe
MeO
S
HN
O
O
MeO
MeO
OMe

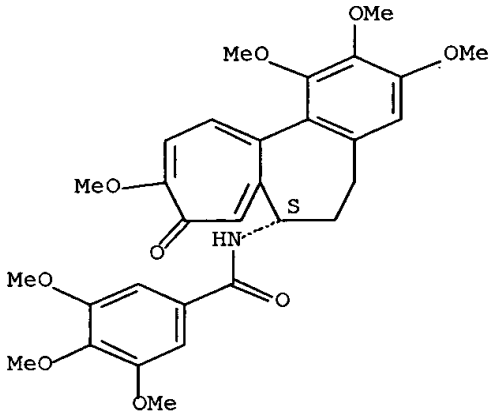
L10 ANSWER 24 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1986:400175 CAPLUS
DN 105:175
TI B ring regulation of colchicine binding kinetics and fluorescence
AU Bhattacharyya, B.; Howard, Rosilyn; Maity, S. N.; Brossi, A.; Sharma, P. N.; Wolff, J.
CS Natl. Inst. Arthritis, Diabetes, Dig. Kidney Dis., Natl. Inst. Health, Bethesda, MD, 20892, USA
SO Proceedings of the National Academy of Sciences of the United States of America (1986), 83(7), 2052-5
CODEN: PNASA6; ISSN: 0027-8424
DT Journal
LA English
AB Several properties of the colchicine-tubulin interaction, such as assocn.
rate, reversibility, and the promotion of drug fluorescence, have been related to the B ring of colchicine [64-86-8]. The B ring itself retards
the binding rate, and substitution at C-7 leads to further binding rate decreases that appear to be related to both substituent bulk and the presence of an N-acyl group. Thus, the decreasing order of binding rates
is 2-methoxy-5-(2',3,4'-trimethoxyphenyl)tropone [60423-21-4] > 7-deacetamidocolchicine [1420-08-2] > N-deacetylcolchicine [3476-50-4] .gtoreq. colcemid [477-30-5] > colchicine > N-benzoyldeacetylcholchicine
[**63989-75-3**]. The apparent irreversibility of the binding seems more closely related to the presence of an N-acyl group than to the bulk of the substituent at C-7. Substitution at C-7 also affects the tropolone
fluorophore. Thus, amines (deacetylcholchicine, colcemid, or N-methylcolcemid) fluoresce poorly in the presence of tubulin, whereas substitution of the amino group with an acyl group enhances fluorescence.
The presence of an N-acyl group at C-7 is essential for enhanced fluorescence. Thus, in addn. to the A- and C-ring portions of the mol., the B ring of colchicine is a third determinant recognized by the binding
site on tubulin.
IT **63989-75-3 86436-39-7**
RL: PRP (Properties)
(tubulin binding kinetics and fluorescence of, structure in relation to)
RN 63989-75-3 CAPLUS
CN Benzamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

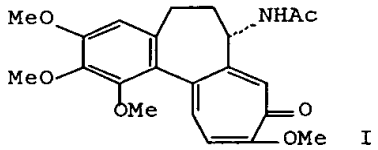


RN 86436-39-7 CAPLUS
CN Benzamide, 3,4,5-trimethoxy-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-
oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 25 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1986:141708 CAPLUS
DN 104:141708
TI Relationships between chemical structures and antimitotic activities of a group of colchicine alkaloids
AU Dvorackova, S.; Guenard, D.; Picot, F.; Simanek, V.; Waisser, K.
CS Med. Fac., Palacky Univ., Olomouc, Czech.
SO Acta Universitatis Palackianae Olomucensis, Facultatis Medicae (1985), 111, 13-22
CODEN: AUPMAF; ISSN: 0301-2514
DT Journal
LA English
GI

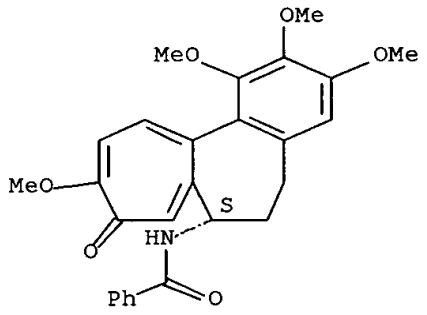


I

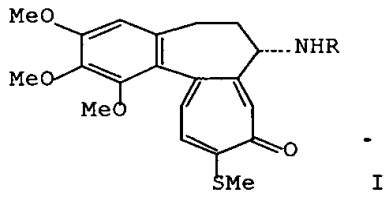
AB The values of the hydrophobicity (RM) of 23 alkaloid derivs. of colchicine (I) [64-86-8] were detd. by TLC. The hydrophobic properties were correlated with the antitubulin activity of the compds.; the results show that a higher activity can be expected in those compds. contg. an amide group at the C atom C(7). Substitution of the N by an alkyl group will probably produce a decrease in activity.

IT **63989-75-3**
RL: BIOL (Biological study)
(antitubulin effect and hydrophobicity of, structure in relation to)
RN 63989-75-3 CAPLUS
CN Benzamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 26 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1985:488108 CAPLUS
DN 103:88108
TI Synthesis and biological effects of novel thiocolchicines. 3. evaluation
of N-acyldeacetylthiocolchicines, N-(alkoxycarbonyl)deacetylthiocolchicine
s, and O-ethyldemethylthiocolchicines. New synthesis of thiodemecolcine
and antileukemic effects of 2-demethyl- and 3-demethylthiocolchicine
AU Kerkes, Peter; Sharma, Padam N.; Brossi, Arnold; Chignell, Colin F.; Quinn, Frank R.
CS Lab. Chem., Natl. Inst. Arthritis, Diabetes Dig., Kidney Dis., Bethesda, MD, 20205, USA
SO Journal of Medicinal Chemistry (1985), 28(9), 1204-8
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
OS CASREACT 103:88108
GI



I

AB N-Acyldeacetylthiocolchicines, e. g. I (R = Bz), N-(alkoxycarbonyl)deacetylthiocolchicines, thiodemecolcine (I R = Me) and its Me carbamate, and O-Et ethers of demethylthiocolchicines were prepd. and evaluated in vitro in a tubulin binding assay and in vivo in mice for
acute toxicity and in the P388 lymphocytic leukemia assay. Thus, deacetylthiocolchicine (I, R = H) was treated with BzCl to give I (R = Bz). Selective ether cleavage of I (R = Me) with concd. H2SO4 at 50 .degree.C afforded the 2-demethyl congener, characterized as its N,O-diacetyl deriv. Several of the compds. showed high potency in the tubulin binding assay, matching the potency of colchicine. Several N-(alkoxycarbonyl)deacetylcolchicines (carbamates) exhibited strong binding affinity to tubulin but had only weak activities against the P388
tumor system, suggesting that other factors besides tubulin binding may be
important for the biol. effects. The compds. potent in the tubulin binding assay and in the P388 leukemia assay in mice were generally also toxic to mice in the acute toxicity test, showing thus a similar behavior
of thiocolchicines to that obsd. earlier with colchicines. A considerable
amt. of data collected for 2-demethyl- and 3-demethylthiocolchicine suggests that the latter represents a broad-spectrum antitumor agent of considerable promise and possibly a less toxic substitute for

colchicine.

IT **63620-47-3P**

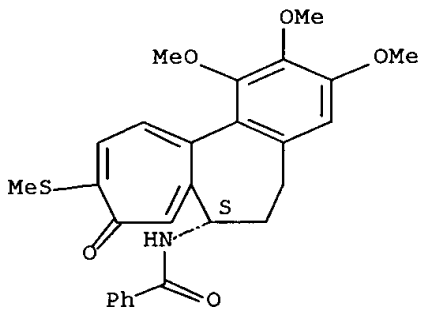
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and antitumor activity of)

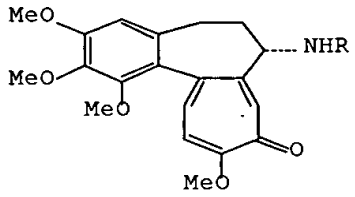
RN 63620-47-3 CAPLUS

CN Benzamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

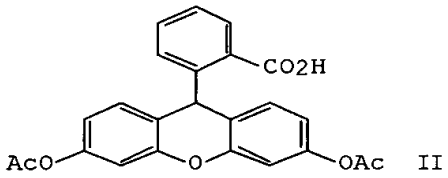
Absolute stereochemistry.



L10 ANSWER 27 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1984:175098 CAPLUS
DN 100:175098
TI Reaction of alcohols and amines with diacetyldihydrofluorescein (DADF): conversion into erythrosine-derivatives on TLC-plates by ammonia and iodine vapors
AU Sharma, Padam N.; Brossi, Arnold
CS Lab. Chem., Natl. Inst. Arthritis, Diabetes, Dig., Kidney Dis., Bethesda, MD, 20205, USA
SO Helvetica Chimica Acta (1984), 67(1), 301-4
CODEN: HCACAV; ISSN: 0018-019X
DT Journal
LA English
GI



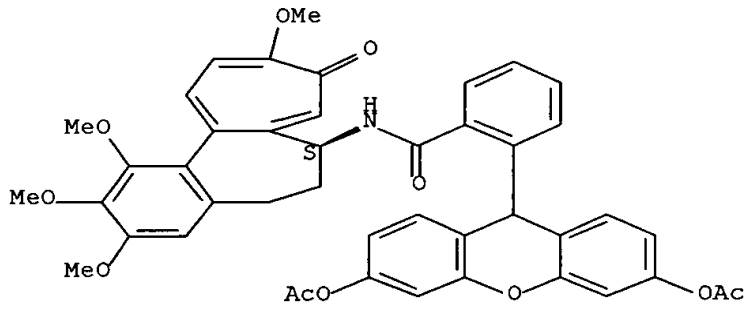
I



II

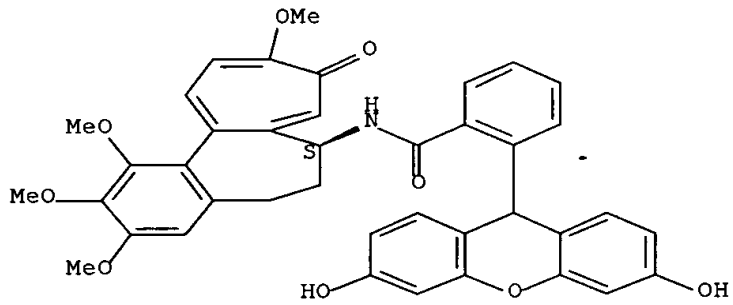
AB Reaction of deacetylcolchicine (I, R = H) and colchifoline (I, R = COCH2OH) with diacetyldihydrofluorescein (II) afforded the corresponding amide and ester derivs., which converted on thin layer chromatog. (TLC plates after exposure to ammonia and iodine vapors into red colored pigments. This reaction, also obsd. with II derivs. of codeine, quinine and mescaline is highly sensitive. The red pigment produced from the II ester of colchifoline formed by the ammonia-iodine treatment is the corresponding erythrosine ester deriv. II emerges from these investigations as a useful reagent to detect alcs. and amines in crude mixts. and for dye labeling.
IT **89759-27-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and hydrolysis of)
RN 89759-27-3 CAPLUS
CN Benzamide, 2-[3,6-bis(acetyloxy)-9H-xanthen-9-yl]-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



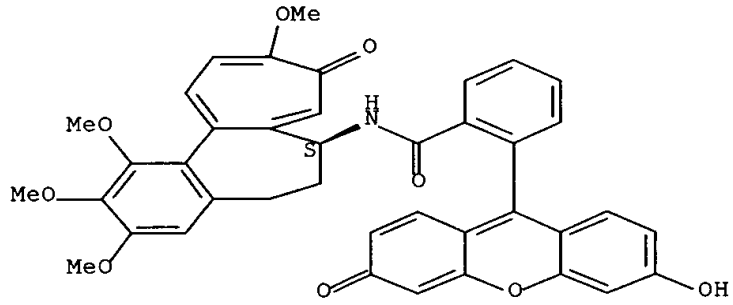
IT **89777-59-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)(prepn. and oxidn. of)
RN 89777-59-3 CAPLUS
CN Benzamide, 2-(3,6-dihydroxy-9H-xanthen-9-yl)-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

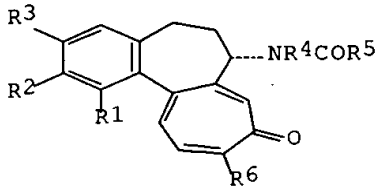


IT **89759-29-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 89759-29-5 CAPLUS
CN Benzamide, 2-(6-hydroxy-3-oxo-3H-xanthen-9-yl)-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

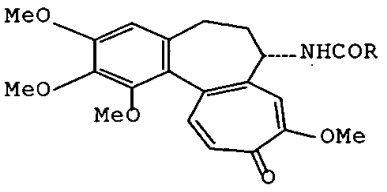
Absolute stereochemistry.



L10 ANSWER 28 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1983:515557 CAPLUS
DN 99:115557
TI Biological effects of modified colchicines. 2. Evaluation of catecholic colchicines, colchifolines, colchicide, and novel N-acyl- and N-aroyldeacetylcolchicines
AU Brossi, Arnold; Sharma, Padam N.; Atwell, Louise; Jacobson, Arthur E.; Iorio, Maria A.; Molinari, Marisa; Chignell, Colin F.
CS Lab. Chem., Natl. Inst. Arthritis, Diabetes Dig. Kidney Dis., Bethesda, MD, 20205, USA
SO Journal of Medicinal Chemistry (1983), 26(10), 1365-9
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
GI



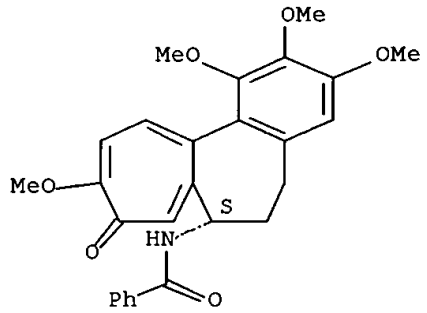
I



II

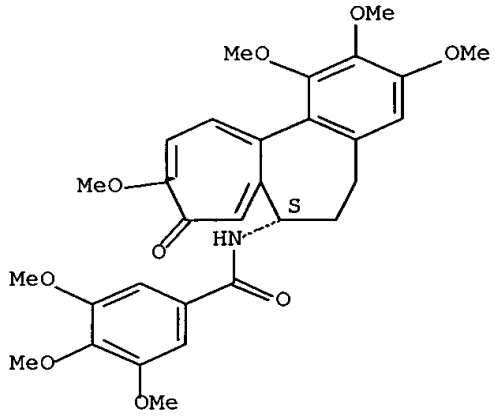
AB The title compds. I (R1 = Me, R2 = H, Me, or phenyltetrazolyl; R3 = Me or phenyltetrazolyl; R4 = H, R5 = Ac, COCH2OH, COCH2OAc, Bz, etc.; R6 = H, OH, or MeO) and II (R = CH2Me, CH2CH2Me, OEt, 3,4,5-(MeO)3C6H2) were prepd. and most of them as well as several analogs previously prepd. tested for their potency in the lymphocytic leukemia P388 screen in mice, for their toxicity in mice, and for their binding to microtubule protein.
N-(Carbetoxydeacetylcolchicine (I; R1 = R2 = R3 = R6 = MeO, R4 = H, R5 = CO2Et) [86436-42-2] showed good biol. properties and colchicide (I; R1 = R2 = R3 = Me, R4 = R6 = H, R5 = Ac) [518-15-0] was highly potent in vivo.
Structure-activity relations are discussed.
IT **63989-75-3P 86436-39-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and biol. activity of)
RN 63989-75-3 CAPLUS
CN Benzamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



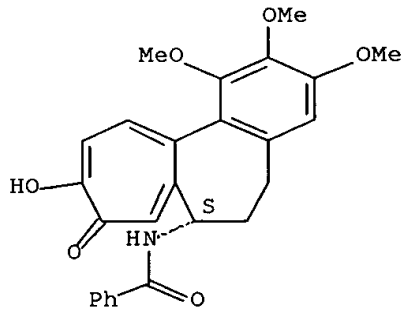
RN 86436-39-7 CAPLUS
CN Benzamide, 3,4,5-trimethoxy-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-
oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



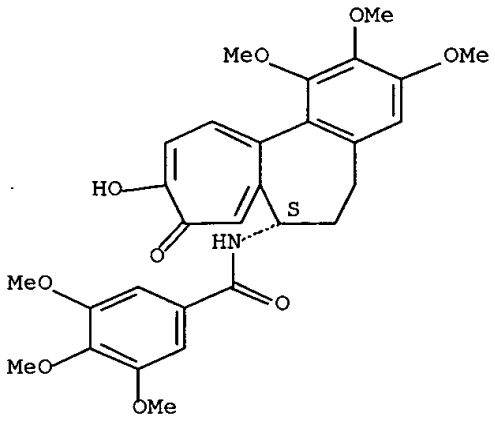
IT **14686-58-9P 86436-41-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 14686-58-9 CAPLUS
CN Benzamide, N-(5,6,7,9-tetrahydro-10-hydroxy-1,2,3-trimethoxy-9-
oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



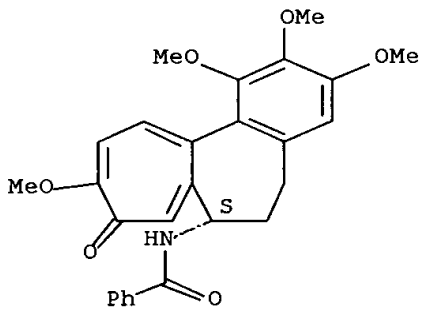
RN 86436-41-1 CAPLUS
CN Benzamide, 3,4,5-trimethoxy-N-(5,6,7,9-tetrahydro-10-hydroxy-1,2,3-trimethoxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



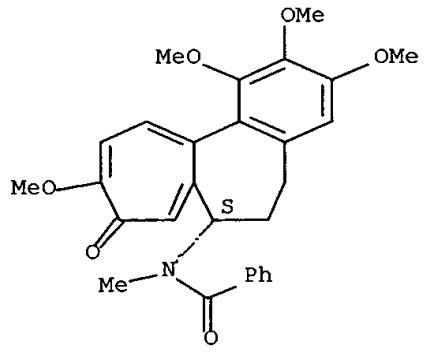
L10 ANSWER 29 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1983:72497 CAPLUS
DN 98:72497
TI Circular dichroism. LXVII. Isolation and chemistry of the alkaloids from
the plants of the subfamily Wurmbaeoideae. XCII. Circular dichroism of alkaloids of colchicine type and their derivatives
AU Hrbek, Jaromir, Jr.; Hruban, Ladislav; Simanek, Vilim; Santavy, Frantisek;
Snatzke, Gunther; Yemul, Srishalam S.
CS Med. Fac., Palacky Univ., Olomouc, 775 15, Czech.
SO Collection of Czechoslovak Chemical Communications (1982), 47(8), 2258-79
CODEN: CCCCAK; ISSN: 0366-547X
DT Journal
LA English
AB The CD spectra of 48 colchicine alkaloids and of some of their derivs. were given. The effects of the substituents and of the basic skeleton on
the chiroptical properties of the measured compds. were discussed.
IT **63989-75-3**
RL: PRP (Properties)
(CD spectrum of)
RN 63989-75-3 CAPLUS
CN Benzamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

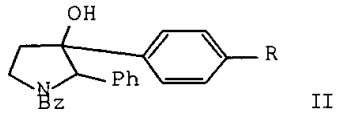


L10 ANSWER 30 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1983:27483 CAPLUS
DN 98:27483
TI Effect of colchicine derivatives on the antibody response induced in vitro
AU Sterzl, J.; Santavy, F.; Sedmera, P.; Cudlin, J.
CS Inst. Microbiol., Czech. Acad. Sci., Prague, 142 20/4, Czech.
SO Folia Microbiologica (Prague, Czech Republic) (1982), 27(4), 256-66
CODEN: FOMIAZ; ISSN: 0015-5632
DT Journal
LA English
AB The relation between structure and biol. activity of the title compds. (I)
was investigated on isolated spleen cells of 3-mo-old female BALB/c mice cultivated with antigen, sheep red blood cells, and the no. of antibody forming cells was detd. by the plaque technique. Some I were toxic in vitro. Most compds. at concn. within the range of the immunoinhibitory effect, do not decrease the normal viability of lymphocytes; however, they
prevent their conversion to the blastic form. Some I showed an immunoinhibitory effect at 0.001 .mu.g/mL, whereas others were ineffective
even at 10 .mu.g/mL. There was no correlation between the I toxicity in mice, rats, and tissue culture (Santavy, F., 1958) and the immunoinhibitory effect on lymphocytes.
IT **14686-62-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(immunosuppressant activity of)
RN 14686-62-5 CAPLUS
CN Benzamide, N-methyl-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

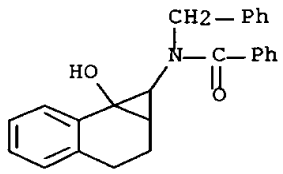


L10 ANSWER 31 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1981:586310 CAPLUS
DN 95:186310
TI Photochemistry of amino ketones. IV. Synthesis of 3-aryl-3-pyrrolidinols
via photocyclization of .beta.-aminopropiophenones
AU Henning, H. G.; Dietzsch, Th.; Fuhrmann, J.
CS Sekt. Chem., Humboldt-Univ., Berlin, DDR-1040, Ger. Dem. Rep.
SO Journal fuer Praktische Chemie (Leipzig) (1981), 323(3), 435-44
CODEN: JPCEAO; ISSN: 0021-8383
DT Journal
LA German
GI

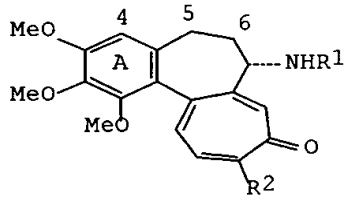


II

AB Photolysis of 4-RC6H4COCH2CH2NBzCH2Ph (I; R = H, Cl, Br, MeO) in Et2O gave
47-50% II, the configurations of which were detd. by NMR. A dipole-dipole
interaction between the 2 CO groups of I occurred in the n,.pi.* excited state.
IT **79610-48-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 79610-48-3 CAPLUS
CN Benzamide, N-(phenylmethyl)-N-(1a,2,3,7b-tetrahydro-7b-hydroxy-1H-cyclopropa[a]naphthalen-1-yl)- (9CI) (CA INDEX NAME)



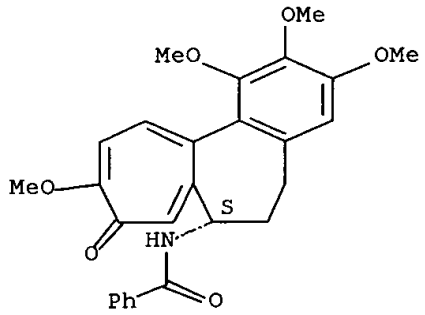
L10 ANSWER 32 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1981:167463 CAPLUS
DN 94:167463
TI Toxicity and quantitative structure-activity relationships of colchicines
AU Quinn, Frank R.; Neiman, Zohar; Beisler, John A.
CS Div. Cancer Treat., Natl. Cancer Inst., Bethesda, MD, 20205, USA
SO Journal of Medicinal Chemistry (1981), 24(5), 636-9
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
GI



I

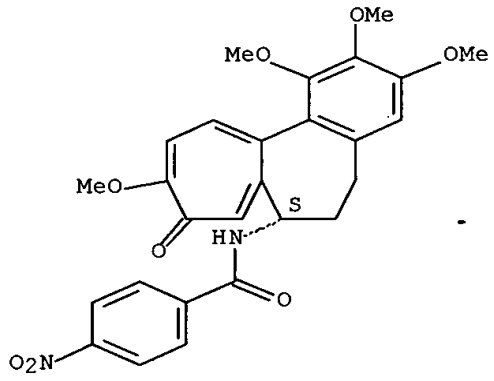
AB A quant. structure-activity relation (QSAR) for 26 7- and 10-substituted
colchicines I (R1 = H, Me, COCH2Cl, COPh, etc.; R2 = OMe, SMe, NEt2, etc.)
is presented for extg. LD50 values from antitumor test data. Apparently,
modification of the 7- and 10-positions of I in order to decrease toxicity
produces a simultaneous decrease in potency. A-ring modified I did not
follow the potency-toxicity correlations. 4-Formylcolchicine [2730-82-7]
was less toxic and had a broader therapeutic range than colchicine itself.
IT **63989-75-3 76129-13-0**
RL: PRP (Properties)
(toxicity of, antitumor activity and QSAR in relation to)
RN 63989-75-3 CAPLUS
CN Benzamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

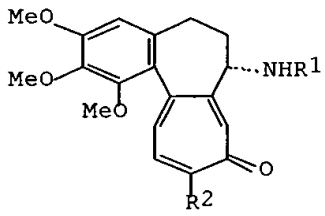


RN 76129-13-0 CAPLUS
CN Benzamide, 4-nitro-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 33 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1981:95720 CAPLUS
DN 94:95720
TI Quantitative structure-activity relationships of colchicines against P388
leukemia in mice
AU Quinn, Frank R.; Beisler, John A.
CS Lab. Med. Chem. Biol., Natl. Cancer Inst., Bethesda, MD, 20205, USA
SO Journal of Medicinal Chemistry (1981), 24(3), 251-6
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
GI



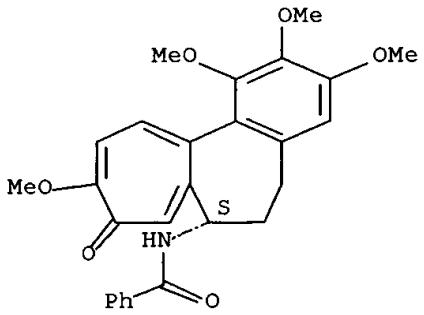
I

AB A correlation showing a parabolic dependence of antitumor potency of the title compds. I (R1 = H, Me, CHO, Ac, etc.; R2 = MeO, MeS, PhCH2S, etc.), some of which were prepd., on the partition coeff. with log P0 = 1.17 was found during quant. structure-activity relations studies. The compds. were evaluated against lymphocytic leukemia P388 in mice. (S)-2-Fluoro-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl)acetamide [26195-68-6] was the most effective. Electron-releasing groups at position 10 slightly improve, whereas electron-withdrawing groups at the same position inhibit activity.

IT **63989-75-3**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(neoplasm inhibiting activity of)

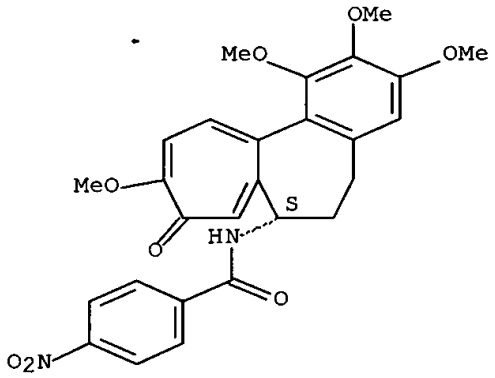
RN 63989-75-3 CAPLUS
CN Benzamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

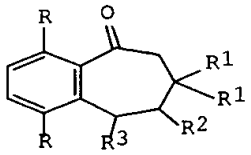


IT **76129-13-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and neoplasm inhibiting activity of)
RN 76129-13-0 CAPLUS
CN Benzamide, 4-nitro-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

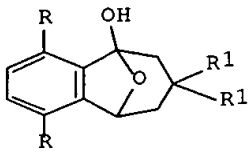
Absolute stereochemistry.



L10 ANSWER 34 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1980:471377 CAPLUS
DN 93:71377
TI Reactions of some derivatives of dihydro- and tetrahydrobenzocycloheptenones. Part II. Synthesis of benzamido derivatives of 6,7,8,9-tetrahydro-(5H)-benzocycloheptene-5-one
AU Kotkowska-Machnik, Zofia; Zakrzewski, Janusz
CS Inst. Org. Chem., Univ. Lodz, Lodz, 90136, Pol.
SO Polish Journal of Chemistry (1979), 53(11), 2363-6
CODEN: PJCHDQ; ISSN: 0137-5083
DT Journal
LA English
GI



I

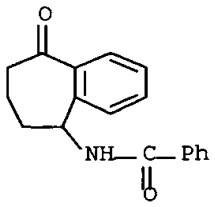


II

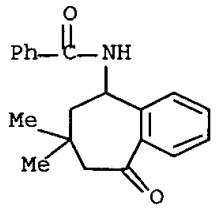
AB Benzocycloheptenones I (R = R2 = H, R1 = H, Me, R3 = NHBz; R = MeO, R1 = R2 = H, Me, R3 = NHBz) were prepd. in 80-94% yields by the Ritter reaction of PhCN with I (R = H, R1 = H, Me, R2R3 = bond; R = MeO, R1 = H, Me, R2R3 = bond) or II (R = MeO, R1 = H; R = MeO, R1 = Me) in H2SO4.

IT **73708-11-9P 73708-12-0P 73708-13-1P 73708-14-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

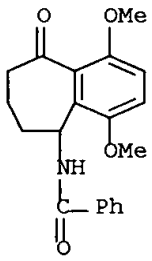
RN 73708-11-9 CAPLUS
CN Benzamide, N-(6,7,8,9-tetrahydro-9-oxo-5H-benzocyclohepten-5-yl)- (9CI) (CA INDEX NAME)



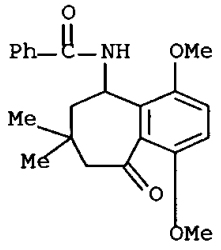
RN 73708-12-0 CAPLUS
CN Benzamide, N-(6,7,8,9-tetrahydro-7,7-dimethyl-9-oxo-5H-benzocyclohepten-5-yl)- (9CI) (CA INDEX NAME)



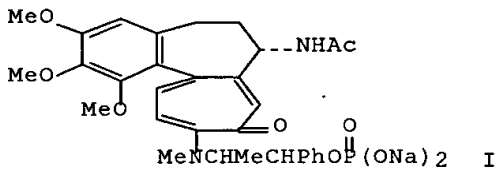
RN 73708-13-1 CAPLUS
CN Benzamide, N-(6,7,8,9-tetrahydro-1,4-dimethoxy-9-oxo-5H-benzocyclohepten-5-
yl)- (9CI) (CA INDEX NAME)



RN 73708-14-2 CAPLUS
CN Benzamide, N-(6,7,8,9-tetrahydro-1,4-dimethoxy-7,7-dimethyl-9-oxo-5H-benzocyclohepten-5-yl)- (9CI) (CA INDEX NAME)



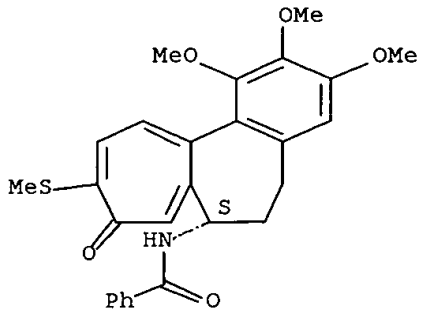
L10 ANSWER 35 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1977:495679 CAPLUS
DN 87:95679
TI New agents for prostatic cancer activated specifically by prostatic acid phosphatase
AU Paul, Buddha D.; Serrano, Joe A.; Friedman, Alan E.; Sarlos, Imre J.; Sternberger, Nancy J.; Wasserkrug, Hannah L.; Seligman, Arnold M.
CS Dep. Res. Oncol. Cell Biol., Sinai Hosp. Baltimore, Inc., Baltimore, MD, USA
SO Cancer Treatment Reports (1977), 61(2), 259-63
CODEN: CTRRDO; ISSN: 0361-5960
DT Journal
LA English
GI



I

AB A preliminary report of colchicine derivs. modified in ring C to give colchiceinamides of substituted ethanolamines and ethanolaminephosphates and of thiocolchicine derivs. modifying ring B is given. These compds. have structural requirements of the substrates for prostatic acid phosphatase [9001-77-8] and were designed for the treatment of prostatic carcinoma. The role of basic N and steric hindrance in giving high P/K ratios (rate of hydrolysis by human prostate compared to the rate by human kidney) is discussed. The deriv. colchiceinamide-(L)-ephedrinephosphate (I) [63699-86-5] (5 g, i.v. in 300 mg and 400 mg doses 3 times a week) caused .ltoreq.2 lb. wt. loss in 8 weeks and some evidence of damage to the epithelial cells of the prostate gland but had no effect on the histol. of liver, kidney, lung, and spleen in stumptail macaque monkeys.
IT **63620-47-3**
RL: BIOL (Biological study)
(acid phosphatase of prostate gland response to, neoplasm inhibition in relation to)
RN 63620-47-3 CAPLUS
CN Benzamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.


OMe
MeO
OMe
MeS
S
HN
O
Ph
O

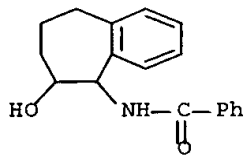
L10 ANSWER 36 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1975:16621 CAPLUS
DN 82:16621
TI 5-Piperazino-6-hydroxy-5H-benzocycloheptenes
IN Drukker, Alexander E.; Judd, Claude I.
PA Colgate-Palmolive Co.
SO U.S., 3 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3836534	A	19740917	US 1971-172193	19710816
PRAI	US 1969-821148		19690501		

GI For diagram(s), see printed CA Issue.

AB Benzocycloheptenols (I, R = CH2CH2OH, CHMe2, Me, H, Bz; R1 = Me, H; NRR1 = 4-methyl-1-piperazinyl) were prepd. Thus, 5,6-epoxy-6,7,8,9-tetrahydro-5H-benzocycloheptene was heated with MeNHCH2CH2OH at 170.degree. for 4.5 hr to give I (R = CH2CH2OH, R1 = Me). I at 10 mg/kg i.p. (mouse) caused stimulation of the central nervous system.

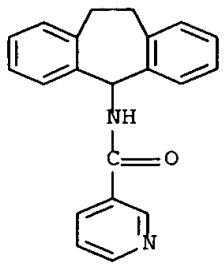
IT **54414-39-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 54414-39-0 CAPLUS
CN Benzamide, N-(6,7,8,9-tetrahydro-6-hydroxy-5H-benzocyclohepten-5-yl)- (9CI) (CA INDEX NAME)



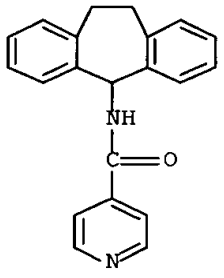
L10 ANSWER 37 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1973:418570 CAPLUS
DN 79:18570
TI Analgesic, antiinflammatory, diuretic, and sedative N-substituted amides
IN Gautier, J. A.; Miocque, M.; Fauran, C.; Le Cloarec, A. Y.; Thomas, J.; Raynaud, G.
PA Delalande S. A.
SO Fr. M., 9 pp. Division of Fr. 1,604,469.
CODEN: FMXXAJ
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 8287		19701221	FR 1968-182827	19681231

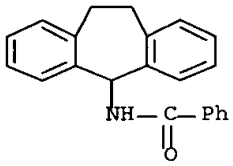
GI For diagram(s), see printed CA Issue.
AB The amides I (R = R1 = H, RR1 = CH2CH2, O, direct bond; R2 = Ph, 3-pyridyl, 4-pyridyl) were prepd. by treating the ketone oxime with R2CO2Et. Thus dibenzocycloheptadienone oxime was treated with BzOEt to give 60% I (RR1 = CH2CH2, R2 = Ph). I (R = R2 = H; RR1 = CH2CH2, O; R2 = 3-pyridyl, 4-pyridyl) were analgesic, i.p. in mice at 50-200 mg/kg. I (RR1 = CH2CH2, O; R2 = 3-pyridyl, 4-pyridyl) were antiinflammatory in the rat at 200-400 mg/kg. I (RR1 = direct bond, R2 = Ph, 4-pyridyl) were diuretic at 10 mg/kg orally in the rat. I (RR1 = CH2CH2, direct bond; R1 = Ph) were sedative in mice at 100 mg/kg. I showed no toxic effects orally in mice at 2 g/kg.
IT **26863-98-9P 26863-99-0P 26942-41-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 26863-98-9 CAPLUS
CN 3-Pyridinecarboxamide, N-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-yl)-
(9CI) (CA INDEX NAME)



RN 26863-99-0 CAPLUS
CN 4-Pyridinecarboxamide, N-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-yl)-
(9CI) (CA INDEX NAME)



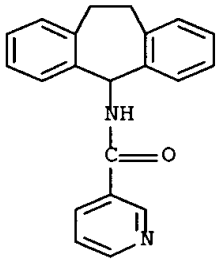
RN 26942-41-6 CAPLUS
CN Benzamide, N-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-yl)- (8CI, 9CI) (CA INDEX NAME)



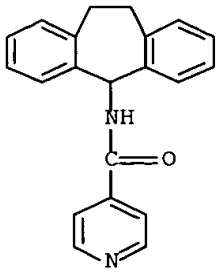
L10 ANSWER 38 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1972:514249 CAPLUS
DN 77:114249
TI N-Substituted aromatic amides
IN Gautier, J. A.; Miocque, M.; Fauran, C.; Le Cloarec, A. Y.
PA Delalande S. A.
SO Fr., 6 pp.
CODEN: FRXXAK
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI FR 1604469		19711217	FR 1968-182827	19681231

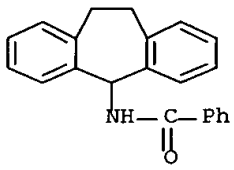
GI For diagram(s), see printed CA Issue.
AB Seven title compds. (I) [Q = O, (CH2)2, single bond, or absent; R = Ph, 3-
or 4-pyridyl] were prepd. by the condensation of oximes, such as dibenzocycloheptadienone oxime, with BzOEt, Et nicotinate, or Et 4-pyridylcarboxylate in KNH2- or NaNH2-NH3(1).
IT **26863-98-9P 26863-99-0P 26942-41-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 26863-98-9 CAPLUS
CN 3-Pyridinecarboxamide, N-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-yl)-
(9CI) (CA INDEX NAME)



RN 26863-99-0 CAPLUS
CN 4-Pyridinecarboxamide, N-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-yl)-
(9CI) (CA INDEX NAME)

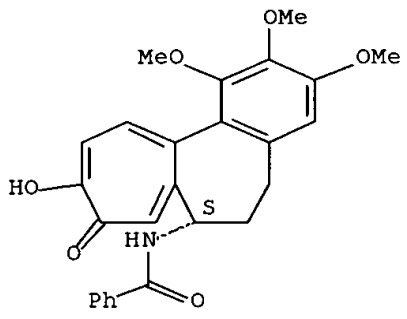


RN 26942-41-6 CAPLUS
CN Benzamide, N-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-yl)- (8CI, 9CI) (CA INDEX NAME)

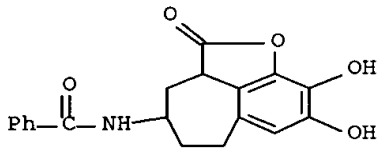


L10 ANSWER 39 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1972:496962 CAPLUS
DN 77:96962
TI Inhibition of sodium urate-induced rat hindpaw edema by cholchicine derivatives. Correlation with antimitotic activity
AU Zweig, Mark H.; Maling, Harriet M.; Webster, Marion E.
CS Natl. Heart Lung Inst., Natl. Inst. Health, Bethesda, MD, USA
SO Journal of Pharmacology and Experimental Therapeutics (1972), 182(2), 344-50
CODEN: JPETAB; ISSN: 0022-3565
DT Journal
LA English
AB Among 17 colchicine derivs. and 2 other antimitotic compds. examd. for their ability to inhibit the edema induced in the rat hindpaw by subplantar injection of sodium urate crystals, demecolcine (I) [477-30-5], colchiceinamide (II) [3123-89-5], trimethylcolchicinic acid methyl ether (III) [36191-19-2] and trimethylcolchicinic acid ethyl ether (IV) [36191-20-5] were almost as effective as colchicine (V) [64-86-8] in inhibiting the edema. Podophyllotoxin [518-28-5] and vinblastine sulfate [143-67-9] also suppressed most of the edema. Five derivs. of V had less inhibitory activity and the other 8 derivs. were ineffective. When the antiinflammatory results obtained with these compds. were compared to the previously reported in vivo antimitotiic activity, the same order of potencies was obtained.
IT **14686-58-9**
RL: BIOL (Biological study)
(inflammation from uric acid inhibition by, antimitotic activity in relation to)
RN 14686-58-9 CAPLUS
CN Benzamide, N-(5,6,7,9-tetrahydro-10-hydroxy-1,2,3-trimethoxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

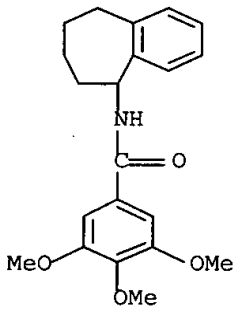
Absolute stereochemistry.



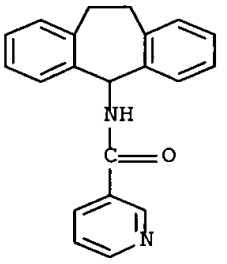
L10 ANSWER 40 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1972:485710 CAPLUS
DN 77:85710
TI Alkaloid biosynthesis. XVI. Colchicine. Origin of the tropolone ring and studies with the C6-C3-C6-C1 system
AU Battersby, A. R.; Dobson, T. A.; Foulkes, D. M.; Herbert, R. B.
CS Robert Robinson Lab., Univ. Liverp., Liverpool, UK
SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1972), (14), 1730-6
CODEN: JCPRB4; ISSN: 0300-922X
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB Col. chicine (I), isolated from Colchicum autumnale fed with (.+-.)-[3-14C]tyrosine, was degraded to show that .apprx.85% of its total activity was located at C-12 in the tropolone ring, indicating that the tropolone system is generated from the aromatic nucleus of tyrosine by a ring expansion process with inclusion of the benzylic C atom. A biosynthetic scheme for colchicine based on a C6-C3-C6-C1 precursor was tested; labeled 1-[5-hydroxy-2-(hydroxymethyl)-4-methoxyphenyl]-3-(3-hydroxy-4,5-dimethoxyphenyl)-propylamine was not incorporated into colchicine by the plants. The lactone prepd. by treatment of the Windaus anhydride (7-benzamido-8,9-dihydro-2,3,4-trimethoxy-7H-benzocycloheptene-5,6-dicarboxylic anhydride) with HI is 7-benzamido-8,9-dihydro-2,3-dihydroxy-7H-benzocycloheptene-5,4-carbolactone (II).
IT **39025-73-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 39025-73-5 CAPLUS
CN Benzamide, N-(2,2a,3,4,5,6-hexahydro-8,9-dihydroxy-2-oxocyclohepta[cd]benzofuran-4-yl)- (9CI) (CA INDEX NAME)



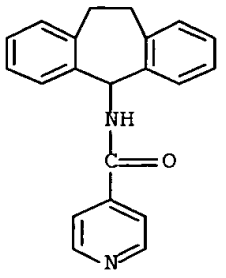
L10 ANSWER 41 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1972:14173 CAPLUS
DN 76:14173
TI Benzocycloheptenes and heterocyclic analogs as potential drugs. I. N-substituted derivatives of 5-amino-6,7,8,9-tetrahydro-5H-benzocycloheptene and some other compounds
AU Vejdelek, Z. J.; Protiva, M.
CS Res. Inst. Pharm. Biochem., Prague, Czech.
SO Collection of Czechoslovak Chemical Communications (1971), 36(4), 1611-23 CODEN: CCCCAK; ISSN: 0010-0765
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB A no. of title amines (I) and two compds. having the amino group in the side chain (II) were prepd. from 5-amino-6,7,8,9-tetrahydro-5H-benzocycloheptene and results of their pharmacol. testing reported.
IT **35047-56-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 35047-56-4 CAPLUS
CN Benzamide, 3,4,5-trimethoxy-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-5-yl)- (9CI) (CA INDEX NAME)



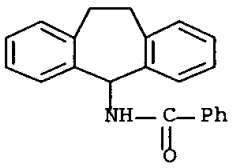
L10 ANSWER 42 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1970:111228 CAPLUS
DN 72:111228
TI Reductions following reactions in liquid ammonia. IV. Formation of amides from diaryl ketoximes
AU Gautier, Jean A.; Miocque, Marcel; Fauran, Claude; Le Cloarec, Albert Y.
CS Lab. Chim. Org., Fac. Pharm., Paris, Fr.
SO Annales Pharmaceutiques Francaises (1969), 27(11), 673-7
CODEN: APFRAD; ISSN: 0003-4509
DT Journal
LA French
AB Liq. NH3 (350 ml) and 10 g Na was treated 30 min with 0.1 mole oxime, 0.1
mole ester added, the mixt. refluxed 4 hr, and 0.43 mole NH4Cl added to give the following amides (compd., m.p., and % yield given): N-(benz hydryl)isonicotinamide, 217.degree., 53; N-(9-fluorenyl)benz-amide, 264.degree., 51; N-(9-fluorenyl)isonicotinamide, 275.degree., 60; N-(dibenzo[bf]cycloheptadienyl)benzamide, 250.degree., 57; N-(di-benzo[bf]cycloheptadienyl)nicotinamide, 246.degree., 70; N-(dibenzo-[bf]cycloheptadienyl)isonicotinamide, 260.degree., 52; N-xanthyliso-nicotinamide, 227.degree., 50.
IT **26863-98-9P 26863-99-0P 26942-41-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 26863-98-9 CAPLUS
CN 3-Pyridinecarboxamide, N-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-yl)-
(9CI) (CA INDEX NAME)



RN 26863-99-0 CAPLUS
CN 4-Pyridinecarboxamide, N-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-yl)-
(9CI) (CA INDEX NAME)



RN 26942-41-6 CAPLUS
CN Benzamide, N-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-yl)- (8CI, 9CI) (CA INDEX NAME)



L10 ANSWER 43 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1969:438670 CAPLUS
DN 71:38670
TI Dihydrodibenzocycloheptanes
IN Edenhofer, Albrecht; Spiegelberg, Hans
PA Hoffmann-La Roche, F., und Co., A.-G.
SO Patentschrift (Switz.), 5 pp.
CODEN: SWXXAS
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CH 464902		19681231	CH	19650108

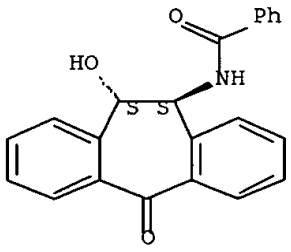
GI For diagram(s), see printed CA Issue.

AB Title compds. were prepd. as antidepressants. Thus, 9 g. Et3N was added dropwise to a soln. of dl-trans-10-hydroxy- 11-amino-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-one in 600 cc. abs. tetrahydrofuran (THF) at 0.degree., a soln. of 4 cc. ClCH2COCl in 100 cc. abs. THF added, and the mixt. stirred 2 hrs. at 0.degree. and worked up toyield d,l-trans-10-hydroxy-11-chloroacetamido-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-one (I), m. 145.degree.. The following 10,11-dihydro-5H-dibenzo-[a,d]cyclohepten-5-ones were also prepd.: d,l-trans-10-hydroxy-11-cyclopropylcarbonylamido-, m. 171.degree.; d,l-trans-10-hydroxy-11-(3-chloropropionamido)-; m. 183-4.degree.; d,l-trans-10-hydroxy-11-benzamido, m. 160.degree.; d,l-trans-10-hydroxy-11- (2-methylpropionamido)-, m. 225-6.degree.; d,l-trans-10-hydroxy-11-(N-methyl-3-chloropropionamido)-, m. 207.degree.; d,l-cis-10-chloro-11-(N-methyl-3- chloropropionamido)-, m. 135-6.degree.; d,l-cis-10-chloro-11-(N-methylpropionamido)-, m. 174-5.degree.; d,l-trans-10-hydroxy-11-acetamido, m. 217.degree.; d,l-trans-10-hydroxy-11-(N-methyl-N-acetamido)-, m. 256-8.degree.; d,l-cis-10-hydroxy-11-acetamido-, m. 197-8.degree.; d,l-trans-10-acetoxy-11- acetamido-, m. 219-20.degree.; d,l-trans-10-acetoxy-11-(N-methylacetamido)-, m. 142-5.degree.; d,l-trans-10-hydroxy-11-formamido-, m. 205-6.degree.; d,l-11- acetamido-, m. 209.degree..

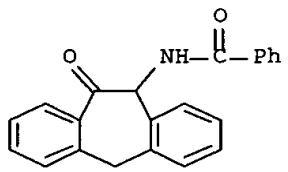
IT **10263-06-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 10263-06-6 CAPLUS
CN Benzamide, N-(10,11-dihydro-11-hydroxy-5-oxo-5H-dibenzo[a,d]cyclohepten-10-yl)-, trans-(.+-.)- (8CI) (CA INDEX NAME)

Relative stereochemistry.

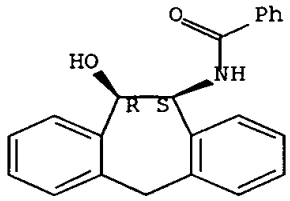


L10 ANSWER 44 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1967:516752 CAPLUS
DN 67:116752
TI Syntheses of 10,11-dihydro-5H-dibenzo[a,d]cycloheptene derivatives
AU Kimoto, Shoshichiro; Ota, Shunsaku
CS Kyoto Coll. Pharm., Kyoto, Japan
SO Yakugaku Zasshi (1967), 87(7), 861-6
CODEN: YKKZAJ; ISSN: 0031-6903
DT Journal
LA Japanese
AB 10,11 - Dihydro - 5H - dibenzo[a,d]cyclohepten-10-one (5 g.) in 30 ml. EtOH is mixed with 10 ml. ethanolic soln. of 1.2 g. Na under ice-cooling, 5 g. BuONO is added under ice-cooling, the mixt. stored in a refrigerator 2 days, 100 ml. H2O added, the mixt. stirred with a small amt. of Et2O, and the aq. layer acidified with concd. HCl to give 4.8 g. 10-isonitroso-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-11-one (I), m. 194-5.degree. (EtOH). To 6.1 g. I in 100 ml. EtOH is added 15 ml. 5N HCl-EtOH and subjected to catalytic redn. using 100 mg. PtO2 to give 6.1 g. 10-amino-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-11-one-HCl (II), m. >300.degree.. Ac2O (3.5 g.) is added to 300 ml. aq. soln. of 3 g. II, the mixt. stirred 1 hr. with 5 ml. aq. soln. of 2.86 g. AcONa, and the ppt. recrystd. (EtOH) to give 2.79 g. 10-acetamido-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-11-one (III), m. 212-13.degree.. III (1 g.) in 100 ml. MeOH is stirred 4 hrs. with 300 mg. NaBH4, concd. in vacuo, and the residue extd. with hot CHCl3 to give 0.76 g. cis-10-acetamido-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-11-ol (IV), m. 213-14.degree., and 0.20 g. corresponding trans-IV, m. 240-1.degree.. Similarly prepd. are cis- and trans-10-benzamido-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-11-ol, m. 195-6.degree., and 230-2.degree., resp. Prepn. of the following compds. was also reported. Namely, 10-benzamido-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-11-one m. 220-2.degree., cis- and trans-10-amino-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-11-ol, m. 196-7.degree., and 222-3.degree., resp., 10-dimethylamino-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-11-ol, m. 117-18.degree., 10-formamido-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-11-ol, m. 159-60.degree., 10-methylamino-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-11-ol, m. 142-3.degree., cis- and trans-10-amino-11-acetoxy-10,11-dihydro-5H-dibenzo[a,d]cycloheptene-HCl, m. 172-4.degree. and 223-4.degree., resp., 10-benzamido-11-chloro-10,11-dihydro-5H-dibenzo[a,d]cycloheptene, m. 147-9.degree. [cis-oxazolinium salt (V) m. 154-5.degree.], and 5H-dibenzo[a,d]cyclohepten-10,11-epoxide, m. 144-6.degree..
IT **16144-74-4P 16144-77-7P 16144-78-8P**
16144-87-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 16144-74-4 CAPLUS
CN Benzamide, N-(10,11-dihydro-11-oxo-5H-dibenzo[a,d]cyclohepten-10-yl)- (8CI) (CA INDEX NAME)



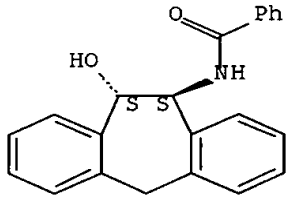
RN 16144-77-7 CAPLUS
CN Benzamide, N-(10,11-dihydro-11-hydroxy-5H-dibenzo[a,d]cyclohepten-10-yl)-,
cis- (8CI) (CA INDEX NAME)

Relative stereochemistry.



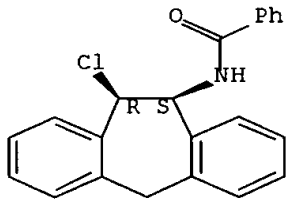
RN 16144-78-8 CAPLUS
CN Benzamide, N-(10,11-dihydro-11-hydroxy-5H-dibenzo[a,d]cyclohepten-10-yl)-,
trans- (8CI) (CA INDEX NAME)

Relative stereochemistry.



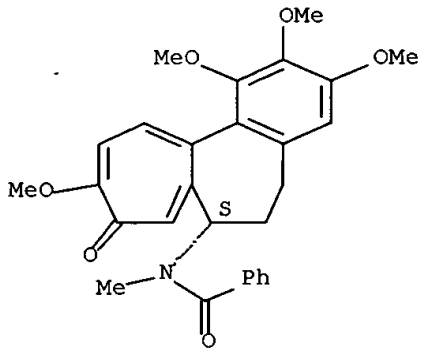
RN 16144-87-9 CAPLUS
CN Benzamide, N-(11-chloro-10,11-dihydro-5H-dibenzo[a,d]cyclohepten-10-yl)-, cis- (8CI) (CA INDEX NAME)

Relative stereochemistry.



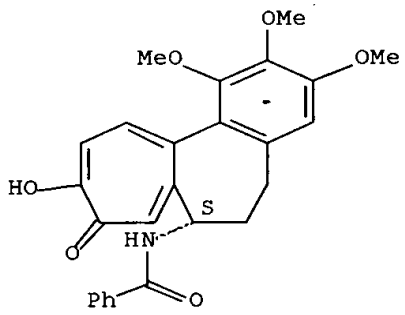
L10 ANSWER 45 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1967:62620 CAPLUS
DN 66:62620
TI Substances from the plants of the subfamily Wurmbaeoideae and their derivatives. LXV. Paper and thin-layer chromatography of alkaloids from the subfamily Wurmbaeoideae
AU Potesilova, H.; Hrbek, Jaroslav, Jr.; Santavy, Frantisek
CS Paleckeho Univ., Olomouc, Czech.
SO Collection of Czechoslovak Chemical Communications (1967), 32(1), 141-57
CODEN: CCCCAK; ISSN: 0010-0765
DT Journal
LA German
AB The plant parts of Colchicum autumnale, Littonia modesta, and Gloriosa virescens were reanalyzed by paper chromatog. and thin-layer chromatog. combined with uv spectroscopy. The Rf values of the following compds. in several solvent systems were tabulated (m.p. and [.alpha.]D in CHCl3 given): colchicine, 157.degree., -121.degree.; N-formyldeacetylcolchicine, 266.degree., -171.degree.; cornigerine, 270.degree., -150.degree.; 2-demethylcolchicine, 180.degree., -112.degree.; 2-acetyl-2-demethylcolchicine, 226.degree., -92.degree.; 2-ethyldemethylcolchicine, 234.degree., -119.degree.; 3-demethylcolchicine, 180.degree., -130.degree.; 3-acetyl-3-demethylcolchicine, 194.degree., -125.degree.; 3-ethyl-3-demethylcolchicine, amorphous, -117.degree.; 3-propyl-3-demethylcolchicine, amorphous, -114.degree.; alkaloid CC-12, 199.degree., -83.degree.; isocolchicine, 226.degree., -307.degree.; colchiceine, 179.degree., -253.degree.; O-acetylcolchiceine, 124.degree., -262.degree.; O-benzoylcholchiceine, 205.degree., -103.degree.; deacetylcolchiceine, 157.degree., -184.degree.; N-formyldeacetylcolchiceine, 266.degree., -175.degree.; N-benzoyldeacetylcolchiceine, 263.degree., -192.degree.; demecolcine, 186.degree., -127.degree.; demecolceine, 126.degree., -223.degree.; 2-demethyldemecolcine, 222.degree., -128.degree.; N,O-diacetyldemecolceine, 245.degree., -192.degree.; 3-demethyldemecolcine, 138.degree., -119.degree.; 3-ethyl-3-demethyldemecolcine, 215.degree., -225.degree.; N,O-diacetyl-3-demethyldemecolcine, 224.degree., -224.degree.; N-methyldemecolcine, 205.degree., -104.degree.; N-acetyldemecolcine, 225.degree., -244.degree.; N-acetylisodemecolcine, 186.degree., -289.degree.; N-propionyldemecolcine, amorphous, -250.degree.; N-formyldemecolcine, 188.degree., -189.degree.; N-benzoyldemecolcine, 211.degree., -245.degree.; speciosine, 211.degree., -21.degree.. Cf. CA 63, 5694e, 18190g; 64, 18696c.
IT **14686-62-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 14686-62-5 CAPLUS
CN Benzamide, N-methyl-N-(5,6,7,9-tetrahydro-1,2,3,10-tetramethoxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **14686-58-9**
RL: BIOL (Biological study)
(properties and occurrence of)
RN 14686-58-9 CAPLUS
CN Benzamide, N-(5,6,7,9-tetrahydro-10-hydroxy-1,2,3-trimethoxy-9-oxobenzo[a]heptalen-7-yl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 46 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1964:91071 CAPLUS
DN 60:91071
OREF 60:15929a-c
TI Thiocolchicine compounds
PA Sandoz Ltd.
SO 4 pp.
DT Patent
LA Unavailable

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 934193		19630814	GB	
PRAI CH		19590803		

GI For diagram(s), see printed CA Issue.

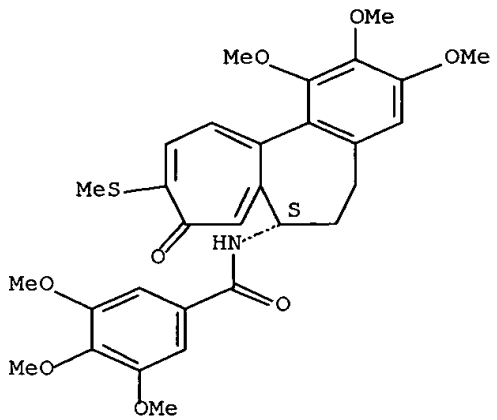
AB Deacetylthiocolchicine (250 mg.) dissolved in 3 cc. abs. C5H5N, 170 mg. 3,4,5-trimethoxybenzoyl chloride added, and the mixt. kept in the dark 2 days at 20.degree. gave N-(3,4,5-trimethoxybenzoyl)deacetylthiocolchicine, [.alpha.]23D 38.degree. (c 1.006, CHCl3). Similarly prepd. were N-(pelargonyl)deacetylthiocolchicine (I), [.alpha.]20D -188.degree. (c 1.2, CHCl3), N-(caprinoyl)deacetylthiocolchicine, [.alpha.]22D -172.degree. (c 1.5, CHCl3), N-(undecanoyl)deacetylthiocolchicine, [.alpha.]21D-184.5.degree. (c 1.05, CHCl3), and N-(lauroyl)deacetylthiocolchicine; [.alpha.]21D-190.degree. (c 0.94, CHCl3).
Infrared peaks were recorded.

IT **103591-54-4**, Colchicine, N-deacetylthio-N-(3,4,5-trimethoxybenzoyl)-
(prepn. of)

RN 103591-54-4 CAPLUS

CN Benzamide, 3,4,5-trimethoxy-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

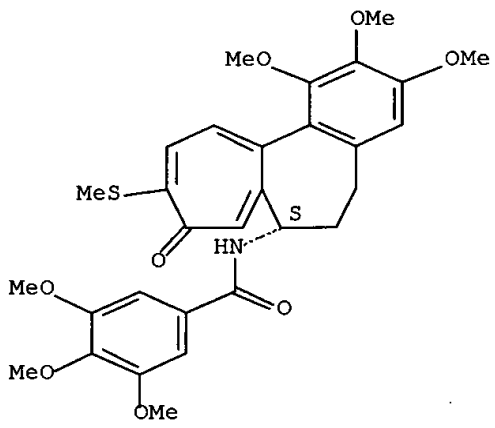


L10 ANSWER 47 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1963:462650 CAPLUS
DN 59:62650
OREF 59:11586h,11587a-b
TI N-(3,4,5-Trimethoxybenzoyl)deacetylthiocolchicine
IN Sigg, Hans P.
PA Sandoz Ltd.
SO 2 pp.
DT Patent
LA Unavailable

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1150992		19630704	DE	
	CH 376123			CH	
	US 3082226		1963	US	
PRAI	CH		19590803		

GI For diagram(s), see printed CA Issue.
AB N-(3,4,5-Trimethoxybenzoyl)deacetylthiocolchicine (I), which shows antimitotic, cytostatic, and antineoplastic activity, is prepd. by treating deacetylthiocolchicine (II) with a reactive deriv. of 3,4,5-trimethoxybenzoic acid. For example, 250 mg. II in 4 cc. dry C5H5N is treated with 200 mg. 3,4,5-trimethoxybenzoyl chloride in the dark at 20.degree. for 48 hrs. The mixt. is dild. with 50 cc. CHCl3; the org. phase is washed with 2N HCl, 2N NaOH, and H2O, dried with Na2SO4, and the solvent is evapd. in vacuo. The residue is crystd. twice from 1:1 EtOAc-pentane to give 72% I, m. 162-83.degree./285 (decompn.), [.alpha.]D 38.degree. (c 1.006, CHCl3), .nu. (CH2Cl2 and Nujol) 1660 cm.-1 A concn. of 10-6.5-10-7 of I in fibroblast cultures completely stops mitosis in the early metaphase; 0.1-0.2 of this concn. has 50% of this effect. Tested on mice injected with mouse leukemia 1210 cells, I (5 mg./kg. daily) shows stronger cytostatic activity than N-deacetyl-N-formylthiocolchicine (III) (1 mg./kg. daily). Daily doses producing 50% deaths in mice within 8 days are: I 58.5 mg./kg.; III, 18.6 mg./kg. I produces no nausea, vomiting, or diarrhea. Cf. Brit. 763,217 (CA 52, 12921f).
IT **103591-54-4**, Colchicine, N-deacetylthio-N-(3,4,5-trimethoxybenzoyl)-
(prepn. of)
RN 103591-54-4 CAPLUS
CN Benzamide, 3,4,5-trimethoxy-N-[5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.


OMe
MeO
OMe
MeS
S
HN
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O
MeO
MeO
OMe

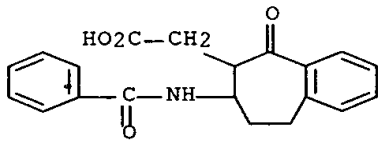
L10 ANSWER 48 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1962:12891 CAPLUS
DN 56:12891
OREF 56:2396d-i,2397a
TI The synthesis of 3-oxo-1,2-benzocycloheptene derivatives
AU Hayashi, Yuji; Sakan, Takeo
CS Osaka City Univ.
SO Nippon Kagaku Zasshi (1960), 81, 1894-8
DT Journal
LA Unavailable
AB AcCH2CO2Et (147 g.) added to 26 g. Na in 2 l. boiling Et2O, the mixt. boiled several hrs., 95 g. PhCH2CH2COCl in 130 ml. Et2O added, and 32 g. H2SO4 in 320 ml. H2O added after standing overnight gave 135 g. PhCH2CH2COCH(Ac)CO2Et (I). b0.01 129-33.degree.. I (278 g.) in 150 ml. MeOH added to 24.5 g. Na in 600 ml. MeOH below 10.degree., the mixt. kept overnight, concd., treated with 55 g. H2SO4 in 1 l. H2O and 200 g. ice gave 127 g. PhCH2CH2COCH2CO2Et (II), b2.0 145-7.degree., and PhCH2CH2CO2Et, b2.5 86-98.degree.. Treating II with PhNHNH2 (III) gave 5-oxo-1-phenyl-3-phenethylpyrazoline, m. 132.degree.. II (69 g.) in 80 ml. EtOH was added to 7.72 g. Na in 200 ml. EtOH, the mixt. treated with 60 g. BrCH2CO2Et in 80 ml. EtOH, kept overnight, filtered, and distd. to give 91.2 g. PhCH2CH2COCH(CO2Et)CH2CO2Et (IV), b0.017 140.degree.. III and IV gave 5-oxo-1-phenyl-3-phenethylpyrazoline-4-acetic acid phenylhydrazide, m. 206-7.degree.. IV (10 g.) and 70 ml. 15% NH3 in EtOH were shaken 3 hrs. at 100.degree. with 2.5 g. Raney Ni and 20 atm. initial pressure, but no H absorption was found. The mixt. gave 1.92 g. 2-phenethyl-3-carbamoyl-5-oxopyrroline (V), m. 197.degree., also obtained by dissolving IV in alc. NH3. The structure of V was confirmed by comparison of ultraviolet absorption spectra with 2-methyl-3-carbamoyl-5-oxopyrroline (VI). Refluxing 100 mg. V with 10 ml. 6N HCl gave 63 mg. PhCH2CH2COCH2CH2CO2H, m. 93-4.degree., also obtained by hydrolysis of IV. IV (20 g.) in 60 ml. MeOH was reduced with 1.2 g. NaBH4 in 30 ml. MeOH to give 62% viscous oil, b0.009, 131-3.degree., which was hydrolyzed with 3N HCl in AcOH to give 98.5% hydrolyzate. The hydrolyzate was recrystd. from C6H6 to give 2 isomers (VIa and VIb, resp.) of 2-phenethylparaconic acid, m. 126.degree. and m. 99.degree.. VIb.H2O m. 70-2.degree.. A mixt. (2.5 g.) of VIa and VIb was heated 1.5 hrs. with 5 ml. C6H6 and 3.5 g. SOCl2, evapd., the residue dissolved in 25 ml. CS2, and the soln. added to 3.0 g. AlCl3 in 30 ml. CS2, refluxed 1.5 hrs., kept 20 hrs. and decompd. to give 1.45 g. 5-hydroxy-3-oxo-1,2-benzocyclohepten-4-ylacetic acid lactone (VII) isomer A (VIIa), m. 110-13.degree., 0.82 g. starting material being recovered. Refluxing the reaction mixt. for 5 hrs., affording a high-melting isomer (VIIb), m. 190.degree., of VII besides VIIa.

Heating VIIb at 160.degree. for 2-3 hrs. gave a mixt. of VIIa and VIIb. VIIa (1.000 g.) in 70 ml. EtOH and 0.105 g. Na in 20 ml. EtOH were mixed, and the mixt. dild. with 30 ml. H2O after 1 hr., evapd. up to 30 ml. and acidified to give 0.986 g. 3-oxo-1,2-benzocyclohepta-1,4-dien-4-ylacetic acid (VIII), m. 171.degree.. Similar treatment of VIIb yielded a small amt. of VIII. VIII (2.000 g.) in 20 ml. NH3 kept 5 days in a sealed tube gave 1.5 g. amino acid (IX), decompg. 146.degree.. IX was difficultly purified and characterized as the Bz deriv., m. 229.degree.. IX (1.5 g.) in 100 ml. PhMe was refluxed 4.5 hrs., the H2O being removed as formed, and the soln. evapd. to give 0.452 g. 5-amino-3-oxo-1,2-benzocyclohepten-4-ylacetic acid lactam, m. 196.degree..

IT **88658-18-8**, 5H-Benzocycloheptene-6-acetic acid, 7-benzamido-6,7,8,9-tetrahydro-5-oxo-
(prepn. of)

RN 88658-18-8 CAPLUS

CN 5H-Benzocycloheptene-6-acetic acid, 7-benzamido-6,7,8,9-tetrahydro-5-oxo-
(7CI) (CA INDEX NAME)



L10 ANSWER 49 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1961:118418 CAPLUS
DN 55:118418
OREF 55:22266e-i,22267a-i,22268a-f
TI Syntheses in the colchicine series. IV. Structural and conformational aspects in some fused seven-membered ring systems
AU Loewenthal, H. J. E.; Rona, P.
CS Israel Inst. Technol., Haifa
SO J. Chem. Soc. (1961) 1429-48
DT Journal
LA Unavailable
AB cf. CA 55, 17672e. 2-(2,3,4-Trimethoxyphenyl)cyclohept-1-enecarboxylic acid (40 g.) with 2 g. Li in 1300 ml. liquid NH3 gave 10.7 g. trans-2-(2,3,4-trimethoxyphenyl)cycloheptanecarboxylic acid (I), m. 96-7.degree. [LiAlH4 redn. product (II), b. 154-6.degree./0.1 mm.] and 15.3 g. cis epimer (III) sepd. by fractional crystn. from C6H14. III esterified with CH2N2, the ester refluxed 12 hrs. in 120 ml. 15% NaOMe in MeOH under N, 120 ml. 10% KOH added, the MeOH distd. and the soln. acidified gave 11 g. I. II (24.7 g.) with 20.35 g. p-MeC6H4SO2Cl in 116 ml. C5H5N at 0.degree. overnight followed by condensation of the tosylate with (tert-BuO2C)2CHNa (45 g. ester, 4.8 g. Na), hydrolysis, and decarboxylation at 180-200.degree. gave 20.2 g. .beta.-[trans-2-(2,3,4-trimethoxyphenyl)cycloheptyl]propionic acid (IV), b0.1 190-200.degree.. IV (20 g.) added to 150 ml. 85% H3PO4 and 240 g. P2O5, then heated 25 min. at 56-8.degree., poured on ice and extd. with C6H6-Et2O gave 12.2 g. oil, which gave 6.61 g. 5,6,7,7a.alpha.,8,9,10,11,12,12a.beta.-decahydro-1,2,3-trimethoxybenzo[a]heptalen-5-one (V), m. 80-81.degree. (C5H12 at 0.degree.). V (5.48 g.) reduced with NaBH4 and the alc. dehydrated with 2-C10H7SO3H gave 4.46 g. 7,7a.alpha.,8,9,10,11,12,12a.beta.-octahydro-1,2,3-trimethoxybenzo(a)heptalene (VI), m. 89-90.degree.; trans hydrogenation product m. 86-7.degree.. SeO2 (2.30 g.) added to 4.46 g. VI in refluxing C5H5N in 3 hrs., the mixt. refluxed 1.5 hr., and the product chromatographed gave 1.84 g. VI and 1.45 g. 7,7a.alpha.,8,9,10,11,12,12a.beta.-octahydro-1,2,3-trimethoxybenzo[a]heptalen-7.alpha.-ol (VII), m. 154.degree.. VII (0.25 g.) in 12 ml. CCl4 with 3 g. act. MnO2 shaken 8 hrs. gave 35 mg. 7,8a.alpha.,8,9,10,11,12,12a.beta.-octahydro-1,2,3-trimethoxybenzo[a]heptalen-7-one, m. 87-8.degree., and a yellow compd., C18H20O6, m. 123-4.degree.. VII (1.38 g.) in 100 ml. EtOH contg. 5 ml. concd. HCl refluxed 1.5 hr. gave 1.13 g. 8,9,10,11,12,12a-hexahydro-1,2,3-trimethoxybenzo[a]heptalene (VIII), m. 118-9.degree., cis hydrogenation product (VIIIa) m. 86-7.degree.. Hydrogenation of VII over 5% Pd-CaO3 in MeOH gave 5,6,7,7a.alpha.,8,9,10,11,12,12a.beta.-decahydro-1,2,3-trimethoxybenzo[a]heptalen-7.alpha.-ol (IX), m. 151-2.degree. (acetate m. 106-7.degree.; tosylate m. 130-31.degree.). IX (0.87 g.) and C5H5N-CrO3 kept overnight gave 0.76 g. 5,6,7,a.alpha.,8,9,10,11,12,12a.beta.-decahydro-1,2,3-trimethoxybenzo[a]heptalen-7-one (X), m. 109.degree.

(2,4-dinitrophenylhydrazone m. 196-7.degree.). .beta.-[cis-2-(2,3,4-Trimethoxyphenyl)cycloheptyl]propionic acid (XI), b0.1 190-200.degree., was prepd. in the manner used for IV. XI (13 g.) with H3PO4-P2O5 at 65-7.degree. gave 8.4 g. 5,6,7,7a.beta.,8,9,10,11,12,12a.beta.-decahydro-1,2,3-trimethoxybenzo[a]heptalen-5-one (XII), b0.1 169.degree.; 2,4-dinitrophenylhydrazones m. 200-1.degree. (red), m. 174.degree. (yellow). XII (8.84 g.) reduced with NaBH4 and the product dehydrated with 2-C10H7SO3H gave 7.0 g. 7,7a.beta.,8,9,10,11,12,12a.beta.-octahydro-1,2,3-trimethoxybenzo[a]heptalene (XIII), m. 74.5-75.degree.; cis hydrogenation product m. 88-9.degree.. SeO2 (3.3 g.) added to 7.3 g. XIII in 40 ml. C5H5N at 85-90.degree. in 12 hrs. and the product chromatographed gave 3.7 g. VIII, 0.15 g. VII, and 0.49 g. 7,7a.beta.,8,9,10,11,12,12a.beta.-octahydro-1,2,3-trimethoxybenzo[a]heptalen-7.xi.-ol (XIV), m. 110-11.degree.; hydrogenation product, m. 138-9.degree.. X (1.05 g.) in 40 ml. C4H8O with 3 g. LiAlH(OBu-tert)3 gave 0.94 g. 5,6,7,7a.alpha.,8,9,10,11,12,12a.beta.-decahydro-1,2,3-trimethoxybenzo[a]heptalen-7.beta.-ol (XV), m. 105-6.degree. (acetate m. 94.5-95.degree.). XV (0.77 g.) with 0.8 ml. POCl3 in 5 ml. C5H5N gave 5,6,8,9,10,11,12,12a-octahydro-1,2,3-trimethoxybenzo[a]heptalene (XVI), m. 102-2.5.degree.. XVI (100 mg.) in 4 ml. CHCl3 was satd. with HCl at -10.degree. and kept overnight to give 52 mg. 5,6,7,7a,8,9,10,11-octahydro-1,2,3-trimethoxybenzo[a]heptalene, m. 78-8.5.degree. (MeOH) (epoxide, m. 116.5.degree.), identical with deacetamidotetrahydrodemethoxydeoxocolchicine. X (0.58 g.), 0.31 g. NaOAc, 5 ml. HOAc, and 4 ml. Et2O treated with 4.26 ml. 0.5M Br in HOAc dropwise and the mixt. stirred 1 hr. gave 0.62 g. 4-bromo-5,6,7,7a.alpha.,8,9,10,11,12,12a.beta.-decahydro-1,2,3-trimethoxybenzo[a]heptalen-7-one (XVII), m. 121-2.degree.; 2,4-dinitrophenylhydrazone m. 176.degree.. XVII (0.60 g.) with LiAlH(OBu-tert)3 in tetrahydrofuran gave 0.49 g. 4-bromo-5,6,7,7a.alpha.,8,9,10,11,12,12a.beta.-decahydro-1,2,3-trimethoxybenzo[a]heptalen-7.beta.-ol, m. 99-100.degree.. IX acetate (0.24 g.), 0.11 g. NaOAc, 1.75 ml. HOAc, and 3.4 ml. Et2O treated with 1.5 ml. 0.5M Br in HOAc gave 0.20 g. 4-bromo-5,6,7,7a.alpha.,8,9,10,11,12,12a.beta.-decahydro-1,2,3-trimethoxybenzo[a]heptalen-7.alpha.-ol, m. 90-1.degree.. XVII (1.09 g.) in 18 ml. HOAc and 15 ml. Et2O treated with a few drops HBr in HOAc, followed by 6.4 ml. 0.5M Br in HOAc and 0.24 g. NaOAc, the mixt. concd., the residue extd. with Et2O-C6H6 and the ext. heated 1.25 hr. at 120-30.degree. in 6 ml. C5H5N gave 0.46 g. 4-bromo-5,6,7,9,10,11,12,12a-octahydro-1,2,3-trimethoxybenzo[a]heptalen-7-one, m. 141-2.degree.. XVI (0.64 g.) in 21 ml. Et2O, 17 ml. HOAc, and 3.4 ml. H2O added to 16.2 ml. 0.1N H2SeO3 in HOAc, the mixt. kept 2 days, filtered, 60 ml. 50% KOH added at 0.degree., extd. with Et2O-C6H6, the ext. sapond. at room temp. overnight with 30 ml. 5% KOH in MeOH and the product chromatographed gave 110 mg. VIII, 30 mg. 5,6,7,7a,8,9,10,11-

octahydro-1,2,3-trimethoxybenzo[a]heptalen-7.xi.-ol, m. 160-1.degree., and 120 mg. 5,6,8,9,10,11,12,12a.beta.-octahydro-1,2,3-trimethoxybenzo[a]heptalen-8.xi.-ol (XVIII), m. 135-6.degree., .lambda. 279 m.mu.. XVIII (50 mg.) with CrO3-C5H5N gave 20 mg. 5,6,8,9,10,11,12,12a-octahydro-1,2,3-trimethoxybenzo[a]heptalen-8-one, m. 128-9.degree.. VIII (1.15 g.) in 20 ml. refluxing C5H5N treated with 0.51 g. SeO2 in 2.5 hrs., the mixt. refluxed 2.5 hrs. longer and the product chromatographed gave 0.38 g. VIII and 0.30 g. 8,9,10,11,12,12a-hexahydro-1,2,3-trimethoxybenzo[a]heptalen-8.xi.-ol (XIX), m. 130-1.degree.. Hydrogenation of XIX gave 5,6,7,7a.beta.,8,9,10,11,12,12a.beta.-decahydro-1,2,3-trimethoxybenzo[a]heptalen-8.xi.-ol (XX), m. 118-19.degree. and 125-6.degree.; acetate, m. 94.5-95.degree.. XX (142 mg.) with CrO3-C5H5N gave 5,6,7,7a.beta.,8,9,10,11,12,12a.beta.-decahydro-1,2,3-trimethoxybenzo[a]heptalen-8-one (XXI), m. 130-1.degree.; 2,4-dinitrophenylhydrazone m. 215-16.degree.. XXI with LiAlH(OBu-tert)3 gave XX. XXI (40 mg.) in 0.04 ml. (CH2SH)2, 5 mg. ZnCl2, and 4 mg. MgSO4 kept overnight and the product refluxed 3 hrs. in EtOH with 2 g. Raney Ni gave 25 mg. VIIIa. XXI (74 mg.) refluxed 2 hrs. in 6 ml. 1% NaOMe in MeOH gave 5,6,7,7a.alpha.,8,9,10,11,12,12a.beta.-decahydro-1,2,3-trimethoxybenzo[a]heptalen-8-one, m. 149.5-50.degree.. XVI (0.30 g.) in 4 ml. CCl4 treated dropwise with 1.98 ml. 0.5M Br in CCl4, the mixt. kept 1 hr., then the product in 4 ml. dioxane with 10 ml. liq. NH3 kept 18 hrs. in a sealed tube at room temp., the amine isolated, treated with BzClC5H5N and chromatographed gave 17 mg. amide, C26H31NO4, m. 131-4.degree.. Similarly, bromination and amination of 0.14 g. 4-bromo-5,6,8,9,10,11,12,12a-octahydro-1,2,3-trimethoxybenzo[a]heptalene followed by acetylation and hydrogenation gave 35 mg. presumably 7-acetamido-5,6,7,7a,8,9,10,11,12,12a-decahydro-1,2,3-trimethoxybenzo[a]heptalene, m. 158-61.degree.. Hydrogenation of 9.beta.-acetoxy-8,9,10,11,12,12a.beta.-hexahydro-1,2,3-trimethoxybenzo[a]heptalene, followed by sapon. gave 5,6,7,7a.beta.,8,9,10,11,12,12a.beta.-decahydro-1,2,3-trimethoxybenzo[a]heptalene (XXII), m. 119-19.5.degree. (acetate m. 113.5-14.degree.). XXII with CrO3-C5H5N gave 5,6,7,7a.beta.,8,9,10,11,12,12a.beta.-decahydro-1,2,3-trimethoxybenzo[a]heptalen-9-one, m. 150.5-51.degree.. 9.beta.-Acetoxy-7,7a.alpha.,8,9,10,11,12,12a.beta.-octahydrobenzo[a]heptalen-7.beta.-ol (0.13 g.) in 3 ml. CCl4 shaken with 1.1 g. active MnO2 gave 65 mg. yellow compd., C20H22O8, m. 150-52.degree. (decompn.). Hydrogenation of 1.90 g. 1,2,3,4,4a.beta.,11b.beta.-hexahydro-9,10,11-trimethoxy-5H-dibenzo[a,c]cycloheptatrien-5.beta.-ol (XXIIIa)

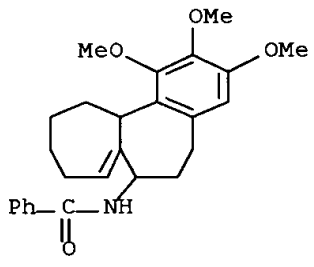
gave
1,2,3,4,4a.beta.,6,7,11b.beta.-octahydro-9,10,11-trimethoxy-5H-dibenzo[a,c]cycloheptatrien-5.beta.-ol (XXIII), m. 132.degree.; acetate m. 112-13.degree. and 129.degree.; tosylate m. 150.degree.. XXIII (120 mg.) with CrO3-C5H5N gave 80 mg. 1,2,3,4,4a.beta.,6,7,11b.beta.-octahydro-9,10,11-trimethoxy-5H-dibenzo[a,c]cycloheptatrien-5-one (XXIV), m. 115.degree.. XXIV (270 mg.) with 0.12 g. LiAlH4 in 10 ml. Et2O refluxed 2 hrs. gave 247 mg. 1,2,3,4,4a.beta.,6,7,11b.beta.-octahydro-9,10,11-trimethoxy-5H-dibenzo[a,c]cycloheptatrien-5.alpha.-ol (XXV), m. 163.5-64.degree.; acetate m. 161.degree.. XXV with CrO3-C5H5N gave XXIV.

POCl3 (0.18 ml.) added to 147 mg. XXIV in 0.6 ml. C5H5N at -10.degree., the mixt. kept 3 hrs. at room temp. and decompd. with ice gave 1,2,3,4,6,7-hexahydro-9,10-11-trimethoxy-11bH-dibenzo[a,c]cycloheptatriene (XXVI), m. 116.5-17.degree.; epoxide (XXVII) m. 160.5-1.5.degree.. XXIII tosylate (1.0 g.) refluxed 2 hrs. in 5 ml. 2,4,6-Me3C5H2N gave a mixt., m. 102-5.degree., of XXVI and 1,2,3,4,4a.beta.,11b.beta.-hexahydro-9,10,11-trimethoxy-7H-dibenzo[a,c]cycloheptatriene (XXVIII). The mixt. (0.54 g.) in 1.0 ml. CHCl3 with 7.15 ml. 0.17M 2-HO2CC6H4CO3H in Et2O at 0.degree. for 2 days gave 239 mg. XXVIII, m. 105-5.5.degree., and 210 mg. XXVII. Hydrogenation of XXVI or XXVIII gave 1,2,3,4,4a.beta.,6,7,11b.beta.-octahydro-9,10,11-trimethoxy-5H-dibenzo[a,c]cycloheptatriene (XXIX). XXVII (0.59 g.) refluxed 7 hrs. with 0.35 g. LiAlH4 in 8 ml. Et2O-C4H8O gave 0.44 g. 1,2,3,4,4a,6,7,11b.beta.-octahydro-9,10,11-trimethoxy-5H-dibenzo[a,c]cycloheptatrien-4a.alpha.-ol (XXX), m. 128.5-29.degree.. XXVI (0.27 g.) in 5 ml. CHCl3 satd. with HCl kept at -10.degree. overnight gave 2,3,4,4a,6,7-hexahydro-9,10,11-trimethoxy-5H-dibenzo[a,c]cycloheptatriene, m. 62-3.degree., .lambda.max. 252, .lambda.min. 238 m.mu.. XXX (94 mg.) heated in 0.25 ml. C5H5N with 0.1 ml. POCl3 at 100.degree. for 1 hr. gave a solid, m. 69-73.degree., .lambda.max. 251, .lambda.min. 244 m.mu.. XXIIIa (65 mg.) refluxed 1 hr. in 3 ml. 3% HCl in EtOH gave 1,2,3,4-tetrahydro-9,10,11-trimethoxy-11bH-dibenzo[a,c]cycloheptatriene (XXXI), m. 107.5-8.degree., .lambda.max. 293, .lambda.min. 265 m.mu.. Hydrogenation of XXXI gave XXIX, m.p. and mixed m.p. 99-102.degree..

IT **121974-69-4**, Benzamide, N-(5,6,7,9,10,11,12,12a-octahydro-1,2,3-trimethoxybenzo[a]heptalen-7-yl)-(prepn. of)

RN 121974-69-4 CAPLUS

CN Benzamide, N-(5,6,7,9,10,11,12,12a-octahydro-1,2,3-trimethoxybenzo[a]heptalen-7-yl)- (6CI) (CA INDEX NAME)



L10 ANSWER 50 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1959:62740 CAPLUS
DN 53:62740
OREF 53:11425h-i,11426a
TI Thiocolchicines
IN Muller, G.; Velluz, L.
PA U.C.L.A.F.
DT Patent
LA Unavailable
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI FR 1109228		19560124	FR	

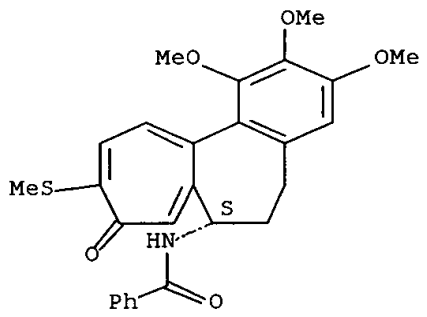
AB HCO2H (15 cc.) and 6 cc. Ac2O at 0.degree. kept 2 hrs. at room temp., slowly added to 2 g. N-deacetylthiocolchicine (I) in 20 cc. pyridine at -10.degree., kept 2 hrs. at room temp., dild. with 20 cc. H2O, acidified with HCl to pH 2, and extd. with CHCl3 gave 80% N-deacetyl-N-formylthiocolchicine, m. 259.degree. (EtOAc), .alpha.20D -275.degree. (0.5%, CHCl3). Similarly, 400 mg. N-deacetyldemethylthiocolchicine (II) gave 83% N-deacetyl-N-formyldemethylthiocolchicine, m. 284-7.degree., .alpha.20D -268.degree. (0.5%, CHCl3). I (600 mg.) in 6 cc. pyridine at 0.degree. treated with 4 cc. BzCl gave 80% N-deacetyl-N-benzoylthiocolchicine, m. 283-5.degree. (EtOH), .alpha.20D -86.degree. (0.5%, CHCl3). Similarly 800 mg. II gave 72% N-deacetyl-N,O-dibenzoyldemethylthiocolchicine (III), m. 264-6.degree., .alpha.20D -114.degree. (0.5%, CHCl3). III(500 mg.), 15 cc. EtOH, and 4 cc. N NaOH kept 2 hrs. gave 250 mg. N-deacetyl-N-benzoyldemethylthiocolchicine, m. 252-4.degree., .alpha.20 -38.degree. (0.5%, CHCl). I (1 g.) in 10 cc. CHCl3 at 0.degree. treated with 5 cc. ClCO2Et and 10 cc. Et3N, refluxed 1 hr., and kept 12 hrs. at room temp. gave 73% N-deacetyl-N-carbethoxythiocolchicine, m. 195.degree., .alpha.20D -240.degree. (0.5%, CHCl3).

IT **63620-47-3**, Colchicine, N-benzoyldeacetylthio-
(prepn. of)

RN 63620-47-3 CAPLUS

CN Benzamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

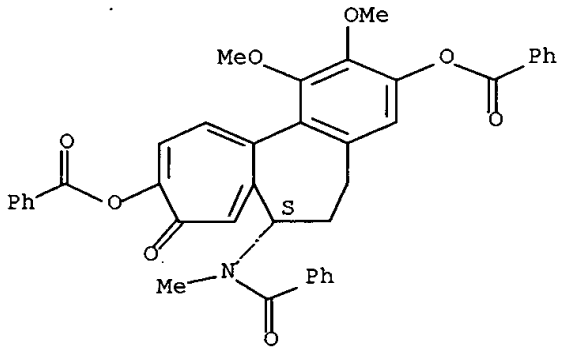
Absolute stereochemistry.



L10 ANSWER 51 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1959:29246 CAPLUS
DN 53:29246
OREF 53:5316g-i,5317a-b
TI Substances of Colchicum autumnale and its derivatives. XLIX. Constitution of compounds S and Ta
AU Santavy, Frantisek
CS Palackeho univ., Olomouc, Czech.
SO Chem. listy (1958), 52, 957-64
DT Journal
LA Unavailable
AB cf. C.A. 52, 655b, 8458f. Compds. isolated from C. autumnale and designated heretofore as compds. S and Ta were proved to be 3-demethyl-N-deacetyl-N-methylcolchicine (I) and N-deacetyl-N-methylcolchiceine (II). I (C20H23NO5) was isolated from bulbs, flowers, and seeds, m. 136-8.degree. (from MeOH-Et2O), [.alpha.]22D -119.degree.; it contains 1 mole MeOH of crystn. Acetylation of I with Ac2O and KOAc at 55.degree. 24 hrs. and at 100.degree. 2 hrs. and chromatography gave 45% I mono-Ac deriv. (III), m. 200-2.degree., [.alpha.]26D -218.degree.. Acetylation of III or of I with Ac2O in C5H5N gave I di-Ac deriv. (IV), m. 222-4.degree. (AcOEt and Et2O), [.alpha.]20D -225.degree.. Partial hydrolysis of IV by heating with aq. alc. NaHCO3 at 55.degree. 24 hrs. or by chromatography on Al2O3 gave III. Treating IV with MeONa gave 3-demethyl-N-methylcolchicic acid (V), m. 245-8.degree. (MEOH and AcOEt), [.alpha.]22D -173.degree.; Me ester (with CH2N2), m. 164-6.degree., [.alpha.]20D -164.degree.. Acidic hydrolysis of I by refluxing 2 hrs. with 0.5N HCl gave 3-demethyl-N-deacetyl-N-methylcolchiceine (VI), m. 128-32.degree., [.alpha.]22D -180.degree.. Heating IV 2 hrs. with 0.1N NaOH on the steam-bath gave 3-demethyl-N-methyl-colchicine, m. 246-8.degree. (from MeOH), [.alpha.]20D -275.degree.. Benzoylation of VI in C5H5N at 0.degree. gave O,O,N-tri-Bz deriv. of VI, m. 230-2.degree. (from AcOEt), [.alpha.]24D -270.degree.. Methylation of I in CHCl3 with CH2N2 in Et2O gave demecolcine, m. 182-4.degree., [.alpha.]23D -128.degree.. Similar methylation of III gave N-methylcolchicine, m. 225-7.degree., [.alpha.]24D -241.degree.. Treatment of I with MeCHN2 in Et2O for 3 days and chromatography gave Et ester of I, m. 213-15.degree. (AcOEt), [.alpha.]23D -225.degree., whose oxidation with KMnO4 afforded 3,5-dimethoxy-4-ethoxyphthalic acid. II, m. 133-5.degree. (MeOH), [.alpha.]20D -220.degree. (CHCl3), [.alpha.]22D -99.degree. (96% EtOH), was transformed to isodemecolcine, m. 142-5.degree., [.alpha.]21D -256.degree., and demecolcine whose acetylation with Ac2O and AcOK gave acetyldemecolcine, m. 224-6.degree., [.alpha.]22D -245.degree.. Treatment with MeONa gave N-methylcolchicic acid, m. 295-7.degree.; Me ester, m. 165-7.degree..
IT **119852-95-8**, Colchiceine, N-benzoyldeacetyl-3-demethyl-N-methyl-, dibenzoate
(prepn. of)
RN 119852-95-8 CAPLUS
CN Colchiceine, N-benzoyldeacetyl-3-demethyl-N-methyl-, dibenzoate (6CI)

(CA
INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 52 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1958:72544 CAPLUS
DN 52:72544
OREF 52:12921f-i,12922a-b
TI Colchiceine derivatives
PA U C L A F
DT Patent
LA Unavailable
FAN.CNT 1

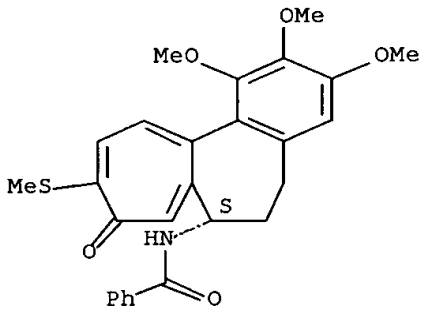
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 763217		19561212	GB	

GI For diagram(s), see printed CA Issue.

AB Thiocolchicines (I), useful for the modification of caryokinesis and for the production of polyploids, were prepd., where R is H, an alkyl, or an acyl radical, R' is H, acyl other than Ac, and R'' is a substituted or unsubstituted alkyl radical. MeOH (60 cc.) and 60 cc. 2N HCl added to 4.88 g. thiocolchicine, the temp. kept 18 hrs. at reflux while 40 cc. aq. MeOH distd., the mixt. extd. with 3 .times. 100 cc. CHCl3, the exts. combined, washed with 4 .times. 100 cc. H2O, dried, and evapd. to dryness gave 400 mg. crude II; the aq. layer and H2O washings combined, mixed with 10N NaOH to pH 13, extd. with 5 .times. 100 cc. CHCl3, the combined exts. washed with 2 .times. 50 cc. H2O, dried, evapd., the residue (5.2 g.) taken up in 20 cc. CHCl3, and 120 cc. Et2O added gave 3.52 g. I (R = R'' = Me, R' = H) (III), m. 200.degree. (dioxane-Et2O), [.alpha.]D -207.degree. (c 0.5%, CHCl3). Similarly and also by acylation and other reactions were prepd. the following I [thiocolchicine used, compd. formed, % yield, m.p., [.alpha.]20D (c 0.5%, CHCl3, except where otherwise noted) given]: I (R = H, R' = Ac, R'' = Me) (IV), I (R = (R' = H, R'' = Me) (V), 80, 185.degree. -213.degree. (c 0.5%, EtOH) (HCl salt, no m.p. stated); thiocolchiside (VI) tetraacetate (VII), V, 60, 185.degree., -213.degree.; (by fractional hydrolysis) VII, IV (and 12% V), 60, 308.degree., -249.degree.; (by alternate alk. and acid hydrolysis) VII, V, 75, 185.degree., -213.degree.; VI, V, 79, 185.degree., -213.degree.; III, I (R = R' = R'' = Me), -, 170.degree., -; III, I (R = H, R'' = Me, R' = CHO), 80, 259.degree., -275.degree.; V, I (R = H, R' = CHO, R'' = Me), 83, 284-7.degree., -268.degree.; III, I (R = R'' = Me, R' = Bz), 80, 283-5.degree., -86.degree.; V, I (R = R' = Bz, R'' = Me) (VIII), 72, 264-6.degree., -114.degree.; VIII, I (R = H, R' = Bz, R'' = Me), -, 252-4.degree., -38.degree.; III, I (R = R'' = Me, R' = CO2Et), 73, 195.degree., -240.degree.; V, IV, -, 308.degree., -249.degree.; I (R = Me, R' = Ac, R'' = Et), I (R = Me, R' = H, R'' = Et), 83, 163.degree., -219.degree.; demecoline (Santavy, C.A. 45, 2152e), thiodemecoline, 80, 222.degree., -164.degree.. Cf. following abstr.

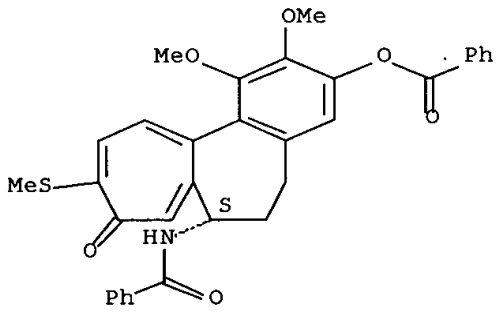
IT **63620-47-3**, Colchicine, N-benzoyldeacetylthio- **120209-43-0**
, Colchicine, N-benzoyldeacetyl-2-demethylthio-, benzoate
(prepn. of)
RN 63620-47-3 CAPLUS
CN Benzamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-
oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 120209-43-0 CAPLUS
CN Benzamide, N-[3-(benzoyloxy)-5,6,7,9-tetrahydro-1,2-dimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 53 OF 53 CAPLUS COPYRIGHT 2003 ACS
AN 1956:8454 CAPLUS
DN 50:8454
OREF 50:1732a-i,1733a
TI Thiocolchicine. III. Some S-alkylthiocolchiceines
AU Velluz, Leon; Muller, Georges
SO Bull. soc. chim. France (1955) 194-7
DT Journal
LA Unavailable
GI For diagram(s), see printed CA Issue.
AB cf. C.A. 49, 11614d. Replacement of the MeO group of the C ring of colchicine (I) by RS has afforded S-alkylthiocolchiceine (II) derivs. Shaking, at 20.degree., 2 g. I, 4 cc. CHCl3, 300 mg. p-MeC6H4SO3H.H2O and 4 cc. EtSH until all in soln. yielded after recrystn. 1 g. II (R = Et, R1 = Me, R2 = Ac) (IIa), m. 208.degree., [.alpha.]D -226.degree. (in CHCl3 unless stated otherwise). This (3.8 g.), refluxed 18 hrs. in 60 cc. MeOH and 60 cc. 2N HCl, yielded 2.45 g. II (R = Et, R1 = Me, R2 = H), m. 163.degree., [.alpha.]D -198.degree.. Acetylation of this in the cold with Ac2O in C5H5N gives back IIa. To 4.5 cc. iso-PrSH in 5 cc. 2.5N NaOH was added a soln. of 5 g. I in 100 cc. H2O. After 48 hrs. at 20.degree. the soln. was extd. with CHCl3 and the ext. chromatographed on Al2O3 to give, after recrystn., 2.2 g. II (R = iso-Pr, R1 = Me, R2 = Ac) (IIb), m. 167-8.degree. and 246.degree., [.alpha.]D -213.degree.; II (R = iso-Pr, R1 = Me, R2 = H), m. 174.degree., [.alpha.]D -194.degree.. Acetylation of this gives back IIb. After several days at 20.degree. a mixt. of I, CHCl3, HOCH2CH2SH, and p-MeC6H4SO3H yielded 35% II (R = CH2CH2OH, R1 = Me, R2 = Ac), m. 236.degree., [.alpha.]D -235.degree.. Warming a mixt. of I, PhCH2SH, and p-MeC6H4SO3H for 4 hrs. at 100.degree. gave 40% II (R = PhCH2, R1 = Me, R2 = Ac), m. 140.degree., [.alpha.]D -204.degree.. To 1.5 g. IIa in 30 cc. CHCl3 was added, at 0.degree., 11 cc. of a 6.7% Et2O soln. of peroxyphthalic acid and, after 30 min., the soln. was washed with NaHCO3 and H2O evapd. and the residue crystd. from AcOEt-Et2O and then from HCONMe2Et2O to yield 230 mg. "L-sulfoxide," m. 230.degree. (decompn.), [.alpha.]D -574.degree.; the mother liquors, after chromatography on Al2O3, yielded 160 mg. "D-sulfoxide," m. 240.degree. (decompn.), [.alpha.]D -70.degree.. Reduction of both sulfoxides by NaHSO3 regenerated IIa. Sulfoxides of IIb were similarly prepd.: "D," 12% yield, m. 248-50.degree., [.alpha.]D -25.degree.; "L," 14%, m. 222-6.degree., [.alpha.]D -570.degree.. Both were reduced to IIb. Treated 24 hrs. at 0.degree. with excess peroxy acid, IIb yielded 40% sulfone, m. 200-2.degree. and 225-8.degree., [.alpha.]D -336.degree.. Similarly treated, II (R = Me, R1 = H, R2 = Ac) (III) yielded 35% sulfone, m. 262-5.degree., [.alpha.]D -510.degree.. After 2 hrs. at 20.degree. a mixt. of 15 cc. 98-100% HCO2H and 6 cc. Ac2O was added slowly, at -10.degree., to 2 g. of II (R = R1 = Me, R2 = H) (IV) in 20 cc. dry

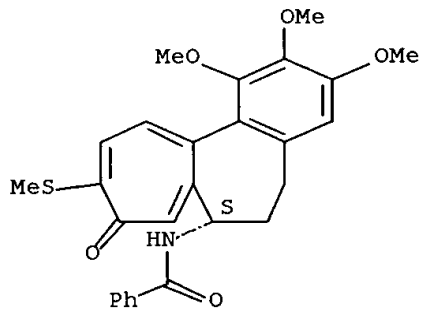
C5H5N.
After 2 hrs. at 20.degree., CHCl3 extn. and recrystn. yielded 1.7 g. N-formyl deriv. of IV, m. 258-60.degree., [.alpha.]D -275.degree.; N-Bz deriv., m. 283-5.degree., [.alpha.]D -86.degree.. To 1 g. IV in 10 cc. CHCl3 at 0.degree. was added 5 cc. EtO2CCl, then, dropwise, 10 cc. Et3N, and the soln. refluxed 1 hr. to yield, after recrystn. from Et2O, 870 mg.
N-carbethoxy deriv., m. 194-5.degree., [.alpha.]D -241.degree.. Formylation of II (R = Me, R1 = R2 = H) (V) yielded 40% N-formyl deriv., m. 284-7.degree., [.alpha.]D -268.degree.. Benzoylation of V gave 45% II (R = Me, R1 = R2 = Bz), m. 264-6.degree., [.alpha.]D -114.degree.. A soln. of 500 mg. of this in 15 cc. EtOH and 4 cc. N NaOH, after standing 2 hrs., yielded II (R = Me, R1 = H, R2 = Bz), m. 252-4.degree., [.alpha.]D -38.degree.. After 24 hrs. at 20.degree., a soln. of 1 g. N-methyldeacetylcolchicine and 1 g. NaSMe in 10 cc. aq. MeOH yielded 760 mg. II(R = R1 = R2 = Me), m. 222.degree., [.alpha.]D -164.degree.; acetylation of this gave 66% N-methylthiocolchicine, m. 236.degree., [.alpha.]D -335.degree.. To 500 mg. III in 2.5 cc. 1N NaOH was added, at 0.degree., 700 mg. "acetobromoglucose" in 3.5 cc. acetone. After 24 hrs. the soln. was CHCl3-extd. and the product recrystd. from EtOH contg. a trace of N NaOH to yield 140 mg. thiocolchicoside, (II, R = Me, R1 = C6H11O5, R2 = Ac), m. 220.degree. (decompn.), [.alpha.]D -609.degree. (in H2O), -240.degree. (in EtOH). This was also obtained in 67% yield by treatment of colchicoside with NaSMe.

IT **63620-47-3**, Colchicine, N-benzoyldeacetylthio- **120209-43-0**
, Colchicine, N-benzoyldeacetyl-2-demethylthio-, benzoate
(prepn. of)

RN 63620-47-3 CAPLUS

CN Benzamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]- (9CI) (CA INDEX NAME)

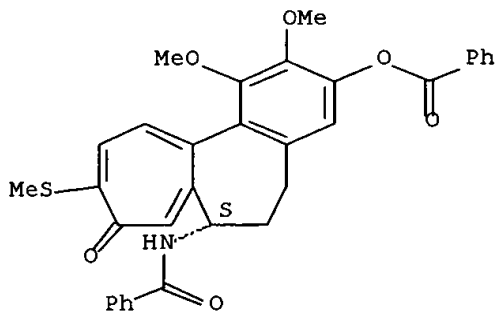
Absolute stereochemistry.



RN 120209-43-0 CAPLUS

CN Benzamide, N-[3-(benzoyloxy)-5,6,7,9-tetrahydro-1,2-dimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.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MeO
O
Ph
MeS
S
HN
Ph
O

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L1 HAS NO ANSWERS
L1              STR
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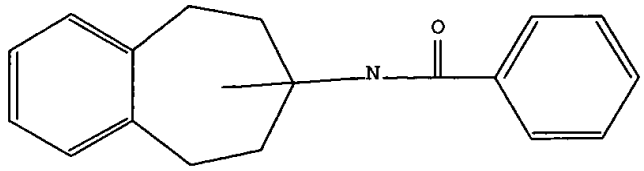

Structure attributes must be viewed using STN Express query preparation.

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L4 HAS NO ANSWERS
L4              STR
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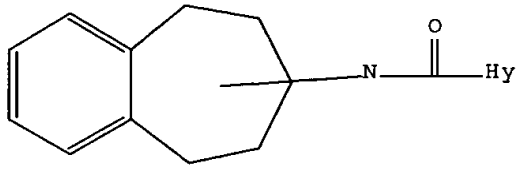

Structure attributes must be viewed using STN Express query preparation.

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     FILE 'STNGUIDE' ENTERED AT 15:43:49 ON 29 APR 2003

     FILE 'REGISTRY' ENTERED AT 15:44:35 ON 29 APR 2003
L1             STRUCTURE UPLOADED
L2           2 S L1
L3         149 S L1 FUL
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     FILE 'REGISTRY' ENTERED AT 15:45:50 ON 29 APR 2003
L4             STRUCTURE UPLOADED
L5           0 S L4
L6     6393876 S 1-5/O AND 1-5/N AND 2-4/NR AND 1-2/NC
L7           0 S L4 SAM SUB=L6
L8         152 S L4 FUL SUB=L6
L9         291 S L3 OR L8
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L10         53 S L9

COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                              241.66     556.77

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)    SINCE FILE      TOTAL
                                                   ENTRY    SESSION
CA SUBSCRIBER PRICE                              -34.50     -34.50

STN INTERNATIONAL LOGOFF AT 15:49:38 ON 29 APR 2003
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